



PERSONNEL QUALIFICATION STANDARD

FOR

RADIO COMMUNICATIONS

QUALIFICATION SECTION 5

(COMMON)

CHIEF OF NAVAL EDUCATION AND TRAINING

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This guide will explain the Personnel Qualification Standards (PQS) program, what it is, and how to use it.

WHAT IS PQS?

The PQS Program is a qualification system for officer and enlisted personnel to perform certain duties. A PQS is a compilation of the minimum knowledge and skills required to qualify for a specific watchstation, maintain specific equipment or perform as a team member within a unit. A PQS program is not designed as a training program, but provides many training objectives. This PQS will assist you in becoming a more productive member of the "combat-ready" qualified Navy team."

WHAT MAKES UP THE PQS PROGRAM?

The PQS program consists of the Standard booklet and the Progress Chart.

A. The Standard booklet contains questions you must be able to answer and performance items you must be able to do in order to qualify for a particular watchstation/Workstation. Standards are written by naval personnel after asking themselves, "What do I need to know to do the job properly?"

The Standard booklet is made up of the following parts:

1. TABLE OF CONTENTS
2. USER'S GUIDE
3. DEFINITIONS OF WORDS USED IN PQS
4. CONTRIBUTING FLEET PERSONNEL
5. FUNDAMENTALS AND SYSTEMS SUMMARY
6. FUNDAMENTALS (100 SECTION)
7. SYSTEMS (200 SECTION)
8. QUALIFICATION SECTION
9. WATCHSTATIONS/WORKSTATIONS (300 SECTION)
10. FEEDBACK FORM

B. The Progress Chart is used to display all the Standards in progress or that have been completed by your division or work center. Your division officer uses the progress chart to determine who is qualified to stand the watches or perform the tasks required by your division. You should check the progress chart periodically to make sure all of the Standards you have completed have been recorded.

I. PQS FORMAT

A. The numbers in PQS follow a definite pattern. The following breakdown of the numbering system is a handy key to PQS format:

<u>Object</u>	<u>1st Digit</u>	<u>2nd thru 4th Digit</u>
Operations	2 = Ship Control and Navigation	100 section = Fundamentals
	3 = CIC/Operations	200 section = Systems
	4 = Weapons	300 section = Watchstations
	5 = Communications	
	6 = Auxiliary (Special)	

Example: 5229

- 5 - Indicates qualification area (5 = Communications)
- 229 - Indicates section 2 (System section) and that it is the 29th System

In the Systems section of your Standard booklet, you may find a format such as the following example. For item .21 you must answer questions A and B. For item .22 all questions are required. If there is no grid with X's, all questions must be answered.

5229.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

		A	B	C
.21	Radiofrequency (RF) output meter	X	X	
.22	RF output selector switch	X	X	X

C. Qualification Group Numbering System

The Watchstation/Workstation section (300) is divided into qualification groups. Your book may be used for more than one final qualification such as Communications Watch Officer (CWO). Each group is indicated on a Final Qualification Sign-Off Page as follows:

Example: NAVEDTRA 43355-5AQ1

- 43355 - Indicates NAVEDTRA number assigned to the PQS package
- 5 - Indicates Communications
- A - Indicates first revision
- Q1 - Indicates the first qualification group

1. FUNDAMENTALS (100 Section) This section identifies basic knowledge needed to do the job properly. Normally you would have acquired this knowledge during the school phase of your training. If you have not been to school, the requirements are outlined and the references listed will aid you in a self-study program.

2. SYSTEMS (200 Section) In systems, the subject under discussion is broken down into functional sections that may be compared to the electrical system in your car. The components of the electrical system are scattered throughout your car, but taken all together they form the "electrical system." The same is true of the equipment you are studying. The components may not all be located in one place, but they still form a system.

3. WATCHSTATIONS/WORKSTATIONS (500 SECTION) This section contains the procedures you need to know to properly perform your job. Watchstations/Workstations are divided into final qualification "groups" (Qual 1, Qual 2 etc.) with each group containing the following:

a. Final Qualification Sign-Off Page

Final record that is filed in your training jacket and recorded in your Service Record upon final qualification

b. Qualification Summary Page

Record of completion of other PQS qualifications, and Watchstations/Workstations within a qualification group

c. Watchstations/Workstations (Task Sign-Off Pages)

Record of completion of performed tasks for each Watchstation/Workstation and instruction watches required by each Watchstation in a qualification group

V. HOW TO QUALIFY

A. Your division officer or work center supervisor will issue you a PQS booklet. Your supervisor will assign Watchstations/Workstations and set time limits (goals) for completing your qualification. Progress toward qualification will be monitored on the division/work center Progress Chart. The estimated completion time, shown at the beginning of each Watchstation/Workstation, is only a recommendation and may be modified by your command. It indicates how long it will take the average sailor under normal conditions to complete each Watchstation/Workstation.

B. Open your Standard booklet to your assigned Watchstation/Workstation. At the beginning of the Watchstation/Workstation you will find a list of items that must be completed before starting your tasks. Standards may include Watchstations/Workstations other than the one on which you are working. Concentrate on the prerequisites for the Watchstation/Workstation to which you have been assigned and do not delay your qualification by spending time on others.

C. Complete the Safety Precautions Fundamentals first, then the rest of the required Fundamentals and Systems. Your supervisor may require you to complete these in a certain order, if not, the choice is up to you. If you do not know the answer to a question in the Standard booklet, look up the answer in one of the reference books listed. If you cannot find the answer in the reference books, ask your supervisor for help.

D. As you complete a Fundamental or System section, have the Qualification Petty Officer sign your Fundamentals and Systems Summary page. When you have completed all prerequisites, you are ready to start the performance items listed for that Watchstation/Workstation. Report your completion of all requirements of that Watchstation/Workstation to your supervisor.

A. As a senior petty officer, you will be required to assign junior personnel to complete specific Watchstations/Workstations in PQS. When you do this, always look through the Standard booklet to determine other items that should be completed before work is started on the required Watchstations/Workstations or related Fundamentals and Systems. If you are assigning more than one Watchstation/Workstation or section to be completed, it is your decision to specify which one should be completed first. The supervisor is an extremely important part of the PQS program if it is to be successful. If you administer PQS with insight, you will find that PQS is a helpful tool that can fit into your overall training plan. You will be responsible for the accuracy, updating and tailoring of PQS to fit your command's needs, as well as for the initiation of appropriate feedback to the PQS Development Group (feedback forms are located in the back of each Standard booklet). You should provide motivation to your personnel by assigning goals, showing interest, and following the trainees' progress. The supervisor is responsible for training and should be the one to update and maintain the progress chart. It is important that the supervisor be aware of who is and who is not progressing, as well as where counseling or individual instruction may be needed. A sample PQS progress chart can be found in the PQS Manager's Guide (NAVEDTRA 43100-1B). As a supervisor you must be totally familiar with the duties, responsibilities, and assignments of your Qualification Petty Officers. Your PQS program cannot survive without good planning and quality control.

B. The estimated completion time, shown at the beginning of each Watchstation/Workstation, is only a recommendation and may be modified by the command. It indicates how long it will take the average sailor under normal conditions to complete each Watchstation/Workstation.

VI. THE QUALIFICATION PETTY OFFICER

A. Selection as a Qualification Petty Officer means that you are one of the command's subject matter experts on those Fundamentals, Systems and Watchstations/Workstations assigned to you. PQS cannot be successful without you. Your job is to be totally knowledgeable in your assigned areas, to make yourself available to check off your trainees' achievements, and to ensure that a high-quality PQS program is maintained in your division.

B. Each Qualification Petty Officer should have a set of standard answers for the Watchstations/Workstations so that all trainees receive the same answer. If multiple signatures are required for a line item, it is preferable that one working day or one watch elapse between signatures. If the trainee does not know the correct answer, it is your responsibility to help find the answer in the reference material. This will speed up the process of qualification and will familiarize your trainees with the use of publications. Obviously, this requires that you know where all the answers can be found.

C. As the Qualification Petty Officer you will be the most likely individual to discover discrepancies in the Standard booklet. Any discrepancies noted should be brought to the attention of your supervisor so that appropriate tailoring and corrections can be made. It must be understood that the PQS booklet should be tailored to fit your command's needs. Such tailoring is to be accomplished only with approval of your Commanding Officer or a designated official.

AIRCREW EVOLUTION - A grouping of aircrew tasks that measure performance in the course of a flight

COMPONENTS - Major units that make up a system when properly connected

COMPONENT PART - A major part of a component

CONTROL SIGNAL - A signal used to control electronic or mechanical devices

EMERGENCY - An event or series of events in progress that will cause damage to equipment or personnel unless immediate corrective steps are taken

FUNDAMENTALS - Basic facts, theories, laws or principles (100 Section in PQS)

INTERLOCK - A protective device to prevent the unsafe operation of equipment or to sequence the action of systems, components or component parts

MAINTENANCE ACTION - A maintenance technician qualification that measures ability to perform a designated task

MAINTENANCE OPERATION - A qualification that measures the ability to perform tasks (using established procedures) to determine the need for maintenance

NORMAL OPERATING VALUE - The point at which satisfactory performance may be expected

PARAMETER - A variable (temperature, pressure, flow rate, voltage, current, frequency etc.) that must be indicated, monitored, checked or sensed during operation or testing

PROTECTIVE FEATURE - A device designed to prevent damage or injury

SENSING POINT - The point in a system at which a signal may be detected

SETPOINT - The value of a parameter at which: (a) an alarm is set off, (b) operator action is required, (c) valves open or shut, (d) proper operation stops and damage may occur, or (e) the optimum value for normal operation

SUPPORT ACTION - A qualification that measures the ability to perform specific or repetitive tasks that do not involve the correction of a malfunction or repair of equipment

SYSTEMS - Groups of components that operate together to perform specific functions (200 Section in PQS)

SYSTEM INTERFACE - (a) How outside influences affect the operation of this system, or (b) How the operation of this system affects the operation of other systems or equipment

TOLERANCES - Maximum and minimum allowable values of a parameter

WATCHSTATION/WORKSTATION - An operator qualification that includes duties, assignments or responsibilities that an individual may be called upon to perform (not necessarily limited to a specific time period)

The following personnel, under the supervision of the PQS Development Group, made a significant contribution to the development of this PQS for Radio Communications:

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RMCS F. JAMANILA	SSC NTC San Diego, CA
RMC N. BECKETT	USS CORAL SEA (CV 43)
RMC T.E. BRITT	USS DENVER (LPD 9)
RMC BUTLER	USS DENVER (LPD 9)
RMC J.E. EVANS	USS LUCE (DDG 38)
RMC C. KELLER	SSC NTC San Diego, CA
RMC R. LAVELLE II	COMCARGRU EIGHT
RMC R. LEARN	SSC NTC San Diego, CA
RMC W. STEIN	USS BARRY (DD 933)
RMC R. TAYLOR	SSC NTC San Diego, CA
RM1 W. ALTENBERGER	USS CONSTELLATION (CV 64)
RM1 S. KIRBY	USS ENTERPRISE (CVN 65)
RM1 R. KUHN	USS NIMITZ (CVN 68)

FUNDAMENTALS

SIGNATUREDATE

5101	Security	_____	_____
5102	Minimize	_____	_____
5103	Message Reproduction/Distribution	_____	_____
5104	Message Format/Handling	_____	_____
5105	Publications	_____	_____
5106	Logs and Files	_____	_____
5107	Operation Orders	_____	_____
5108	Broadcast	_____	_____
5109	Emission Control (EMCON)	_____	_____
5110	Call Signs	_____	_____
5111	Optical Character Reader (OCR) Message Preparation	_____	_____
5112	Quality Control (QC)	_____	_____
5113	Antenna and Radio-Wave Propagation	_____	_____
5114	Satellite Communications (SATCOM)	_____	_____
5115	Naval Modular Automated Communications System (NAVMACS) (V-2)	_____	_____
5116	Naval Modular Automated Communications System (NAVMACS) (V-3)	_____	_____
5117	Special Circuits	_____	_____
5118	Distress Communications	_____	_____
5119	Portable Communications Equipment	_____	_____
5120	Commercial Traffic	_____	_____
5121	Interior Communications (IC)	_____	_____
5122	Communications Watch Officer (CWO)	_____	_____
5123	Power Distribution Panels	_____	_____
5124	Circuit	_____	_____

5125	Tactical Ultrahigh Frequency (UHF) Relay Pod	<hr/>
5126	Radio Safety Precautions	<hr/>
SYSTEMS		
5201	Teletypewriter (TTY) Set	<hr/>
5202	Fleet Single-Channel Radioteletypewriter Broadcast (Types K and M)	<hr/>
5203	Fleet Multichannel Radioteletypewriter Broadcast (Type N)	<hr/>
5204	Nonsecure Radioteletypewriter (Type VV)	<hr/>
5205	Single-Channel Radioteletypewriter (Type B)	<hr/>
5206	Duplex Radioteletypewriter (Type C)	<hr/>
5207	Single-Channel Radioteletypewriter Ship/Shore/Ship (Type D)	<hr/>
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5209	Amplitude-Modulated/Frequency- Modulated (AM/FM) Wideband Secure Voice (Type R)	<hr/>
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5213	Multichannel Radioteletypewriter Ship/Shore/Ship (Type P)	<hr/>
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5215	Satellite Communications (SATCOM) Set (AN/WSC-3)	<hr/>

5216	Satellite Signal Receiving Set (AN/SSR-1)	_____
5217	Naval Modular Automated Communications (NAVMACS) (V-2)	_____
5218	Naval Modular Automated Communications (NAVMACS) (V-3)	_____
5219	Radio Receiver (AN/SRR-19)	_____
5220	Radio Receiver (AN/WRR-3)	_____
5221	Radio Receiver (AN/BRR-3)	_____
5222	Radio Receiver (R-390/URR)	_____
5223	Radio Receiver (R-1051/URR)	_____
5224	Radio Receiver (AN/URR-27)	_____
5225	Radio Receiver (AN/GRR-23(V))	_____
5226	Radio Transceiver (AN/URC-9, AN/SRC-20, AN/SRC-21)	_____
5227	Transmitter (T-827)	_____
5228	Radiofrequency Amplifier (AM-3924/URT)	_____
5229	Radiofrequency Amplifier (AM-3007)	_____
5230	Radio Transmitter (AN/WRT-2)	_____
5231	Radio Transceiver (AN/WSC-3 LOS)	_____
5232	Radio Transceiver (AN/SRC-16)	_____
5233	Radio Transceiver (AN/URC-32)	_____
5234	Radio Transceiver (AN/SRC-23)	_____
5235	Maritime Radio Transceiver (AN/URC-80)	_____
5236	Radio Transceiver (AN/VRC-46)	_____
5237	Radio Transmitter (AN/URT-7)	_____
5238	Radio Transmitter (T-1108/GRT-21)	_____

5239	Antennas (AN/SRA-17 and AN/SRA-43)	_____
5240	Antenna Filter Assembly (AN/SRA-12)	_____
5241	Antenna Coupler Group (AN/SRA-38, 39, 40, 49 and 50)	_____
5242	Antenna Coupler Group (AN/SRA-33)	_____
5243	Antenna Coupler Group (AN/SRA-56, 57 and 58)	_____
5244	Antenna Coupler Group (AN/URA-38)	_____
5245	Ultrahigh-Frequency (UHF) Surface-to-Air Antenna (AN/SRA-62)	_____
5246	Telegraph-Telephone Signal Converter (CV-2460/SGC)	_____
5247	Terminal Set (AN/SGC-1)	_____
5248	Comparator/Converter (AN/URA-17)	_____
5249	Converter/Keyer/Attenuator (AN/UCC-1C/D(V))	_____
5250	Telegraph-Telephone Terminal Set (AN/VCC-2)	_____
5251	Receiver Transfer Switchboard	_____
5252	Direct-Current (DC) Patch Panel	_____
5253	Transmitter Transfer Switchboard	_____
5254	Transmitter-Teletypewriter Control (C-1004/SG)	_____
5255	Direct-Current (DC) Power Supply	_____
5256	Shipboard Communications Quality Monitoring	_____
5257	Radio Set Control (C-1138/UR)	_____
5258	Frequency Standard	_____
5259	Remote-Switching Control (C-7594/U)	_____
5260	Single Audio System (SAS) (SA-2112(V)/STQ)	_____

- 51 Tactical Frequency Management
(AN/TRQ-35(V))
- 52 Amplifier (AM-3729/SR)
- 53 Control Transmitter (C-4621/SR)
- 54 Telegraph Key (SB-3158/U)
- 55 Radio Set (AN/CRT-3)
- 56 Audio Digital Converter (CV-3333/U)

References:

- a. Radioman 3 & 2 (NAVEDTRA 10228)
- b. NTP 4
- c. OPNAVINST 5510.1
- d. Emergency Action Plan
- e. CMS 4
- f. OPNAVINST 5510.45
- g. ACP 122
- h. Standard Operating Procedures (SOP)
- i. NTP 7

- .1 List the authoritative manuals and instructions used by your unit in governing physical security procedures.
- .2 Discuss/define the following:
 - a. Access
 - b. Classification
 - c. Classified information
 - d. Clearance
 - e. Compromise
 - f. Intelligence
 - g. Marking
 - h. Need to know
 - i. Communications security (COMSEC)
 - j. Sealed authentication system (SAS)
 - k. Censorship
 - l. Security area
 - m. Special category (SPECAT)
 - n. Limited distribution (LIMDIS)
 - o. Restricted data (RESDAT)
 - p. No foreign dissemination (NOFORN)
 - q. Downgrading/declassification procedures
 - r. Personal for
 - s. COMSEC material system (CMS)
- .3 Discuss the following security classification categories:
 - a. Top Secret
 - b. Secret
 - c. Confidential
- .4 Discuss the following warning notices and the handling requirement for each:
 - a. Restricted data
 - b. Formerly restricted data
 - c. NOFORN
 - d. EFTO
 - e. FOUO
 - f. PERSONAL FOR
 - g. EXCLUSIVE FOR

- e. Care during working hours
 - f. Care after working hours
 - g. Emergency planning
- .6 Define the following security areas:
- a. Exclusion area
 - b. Limited area
 - c. Controlled area
 - d. Restricted area
- .7 State the responsibility of the discoverer of a compromise or a suspected compromise.
- .8 State the accountability requirements for Top Secret and Secret.
- .9 State the rules for the following:
- a. Methods of destruction
 - b. Records of destruction
 - c. Classified waste
 - d. Emergency destruction
 - e. Priority of emergency destruction
 - f. Methods of emergency destruction
- .10 State the destruction of COMSEC material rules as applied to the following:
- a. Methods of routine destruction
 - b. Records of destruction
 - c. Emergency destruction
 - d. Priority of emergency destruction
 - e. Methods of emergency destruction
 - f. Reports of emergency destruction

References:

- a. ACP 121 & US Supp 1
- b. NWP 4
- c. Standard Operating Procedures (SOP)

- .1 Explain the purpose of minimize.
- .2 State the conditions under which minimize may be imposed.
- .3 Discuss authority to impose, modify or cancel minimize.
- .4 State the message-releasing restrictions under minimize.
- .5 Discuss alternate methods of delivering message traffic during minimize conditions.
- .6 Discuss the procedures to be followed upon receipt of a message imposing minimize conditions.
- .7 Explain the term "minimize considered."

References:

- a. NTP 4
 - b. Standard Operating Procedures (SOP)
 - c. Local Internal Routing Guide
 - d. NWP 4
 - e. NAVSHIPS Safety Manual
- .1 Define the following as applied to message reproduction/distribution:
- a. Advance copy routing
 - b. Internal routing
 - c. Collating
 - d. Selective routing
 - e. Reproduction
 - f. Shore base message service system (SBMSS)
- .2 Describe the special requirements for handling the following:
- a. Top Secret
 - b. Secret
 - c. Special category
 - d. LIMDIS
 - e. Personal/personal for
 - f. Death or serious illness notification
 - g. Multipage/section messages
 - h. Message fillers
- .3 Discuss the safety precautions to be followed while operating reproduction equipment.

- c. RCP 125
- d. ACP 125
- e. ACP 126
- f. JANAP 128
- g. NTP 4
- h. NWP 4
- i. NTP 3
- j. SECNAVINST 5210.11
- k. DODINST 5200.19
- l. ACP 127
- m. OPNAVINST 3100.6
- n. CINCLANTFLT OPORD 2000, ANNEX K
- o. CINCPACFLT OPORD 201, ANNEX K

- .1 State the three main parts of a message.
- .2 Explain the purpose of format lines one through sixteen.
- .3 Define and identify the following:
 - a. Header line (routing indicators)
 - b. Security warning
 - c. Precedence
 - d. Date time group (DTG)
 - e. Originator
 - f. Action addressee
 - g. Information addressee
 - h. Exempted (XMT) addressees
 - i. Classification
 - j. Standard subject identification code (US/NATO)
 - k. Passing instructions
 - l. Subject line
 - m. Reference line
 - n. Text
 - o. Declassification instructions
 - p. Downgrading instructions
 - q. Releaser
 - r. Drafter
 - s. Out-router
 - t. Service cross
 - u. Proofreader
 - v. Service/tracer message
 - w. Message cancellation
 - x. Content indicator code (CIC)
 - y. Collective address designator (CAD)
 - z. Time of file (TOF)
 - aa. Start of message (SOM) functions
 - ab. End of message (EOM) functions
 - ac. Time of receipt (TOR)
 - ad. Time of delivery (TOD)

- c. ACP 126
 - d. Modified ACP 126
 - e. DD-173 optical character reader (OCR) format
 - f. JANAP 128
- .5 Explain message handling as determined by the following:
- a. Classes
 - b. Classification
 - c. Precedence
 - d. Special handling instructions
 - e. Backlog
 - f. For official use only (FOUO)
- .6 Describe handling procedures for the following emergency action messages (EAMs):
- a. OPREP-3
 - b. Red Rocket
 - c. White Rocket
 - d. OPREP-3 White Pinnacle
- .7 Describe the purpose of the following and identify where each is used:
- a. Address indicating group (AIG)
 - b. ZEN addresses
 - c. NOTAL
 - d. PASEP
 - e. RADDR
 - f. ZWL
 - g. ZNZ1
 - h. ZPW
 - i. ZDK
 - j. ZDS
 - k. ZEL
 - l. Collective address designator (CAD)
- .8 Describe the communications improvement program and how it can improve message handling.

.1 Discuss the purpose of the following publications:

- | | |
|--------------------------------|--------------------------|
| a. ACP 100 & US Supp 1 | t. FTP LANT/MED |
| b. ACP 110 | u. FTP PAC/IO |
| c. ACP 112 & US Supp 1 | v. FXP 3 |
| d. ACP 113 | w. JANAP 119 |
| e. ACP 121 & US Supp 1 | x. JANAP 128 |
| f. ACP 122 | y. CSP 1 |
| g. ACP 124 | z. NAVTELCOMINST C2796.1 |
| h. ACP 125 | aa. NTP 2 |
| i. ACP 126 | ab. NTP 3 & Supp 1 |
| j. ACP 127, US Supp 1 & Supp 1 | ac. NTP 4 |
| k. ACP 131 & US Supp 1 | ad. NTP 5 |
| l. ACP 135 | ae. NTP 6 Supp 1 |
| m. ACP 165 | af. NTP 7 |
| n. ACP 167 | ag. NTP 9 |
| o. ACP 176 | ah. NTP 10 |
| p. AKAI 6/16 | ai. NWP 4 |
| q. AMSH 1707 | aj. NWP 33 |
| r. AXP 3 | ak. NWP 37 |
| s. CMS 4 | al. OPNAVINST 5510.1 |

.2 Discuss the following as applied to the Naval Warfare Publication Library:

- a. Accountability
- b. Changes and corrections
- c. Extracts
- d. Identification and procurement
- e. Page checks

.3 Discuss the following as applied to Communications Security Material System (CMS):

- a. Internal accountability
- b. Changes and corrections
- c. Extracts
- d. Identification and procurement
- e. Inventory
- f. Key cards
- g. Page checks
- h. Local custody

References:

- a. Radioman 3 & 2 (NAVEDTRA 10228)
- b. NTP 4
- c. NTP 9
- d. CMS 4
- e. ACP 122
- f. JANAP 128

.1 Describe and identify the following logs and files:

- a. Communications center file
- b. Radio station file
- c. Broadcast file
- d. Crypto center file
- e. Commercial message file
- f. General message file
- g. Station serial number log
- h. Broadcast checkoff log
- i. Circuit logs
- j. Naval Warfare Publications Library (NWPL) watch-to-watch inventory
- k. Crypto watch-to-watch inventory
- l. Visitors log
- m. Historical file
- n. Central message log (dupe log)
- o. Tracer/service file
- p. Trouble report log
- q. Status board
- r. Supervisor's log

.2 Discuss methods and security requirements for the disposition of logs and files.

References:

- a. NWP 11
- b. NWP 4

- .1 Identify and define the following:
 - a. Heading
 - b. Body
 - c. Ending
 - d. Annex
 - e. Appendix
 - f. Tab
 - g. Enclosure
- .2 Explain the purpose of the following:
 - a. Operation orders (OPORDs)
 - b. Communications annex
 - c. COMPLAN
 - d. Communication Standard Operating Procedures (SOP)
- .3 Identify the seven paragraphs in the body of an OPORD.

- c. Area Communications Information Bulletin (ACIB)
- d. NAVCAMS Fleet Telecommunications Publications
FTP LANT/MED/PAC/IO

.1 Define the functions/purposes of the following:

- a. Broadcast area
- b. Communications area master station (CAMS)
- c. Broadcast keying station
- d. Broadcast radiating station
- e. Broadcast control station
- f. Channel subscribers
- g. Timing signals (WWV/WWVH)
- h. Broadcast channel maintenance
- i. Guard list
- j. Broadcast shifts
- k. Communications guard shifts
- l. Emergency broadcast shift
- m. Communications spot reports
- n. Broadcast screen requests

References:

- a. Radioman 3 & 2 (NAVEDTRA 10228)
- b. Radioman 1 & C (NAVEDTRA 10229)
- c. Ship's Emission Control Bill
- d. ATP 1, Vol 1
- e. NWP 4
- f. NTP 9
- g. NWP 33

.1 Define/discuss the following:

- a. EMCON
- b. Types of EMCON
- c. Methods of communicating during EMCON
- d. Authority to impose EMCON
- e. Authority to lift EMCON
- f. Procedures to use when breaking EMCON
- g. Internal reporting requirements when EMCON is set
- h. Radiation hazard (RADHAZ)
- i. Hazards of electromagnetic radiation to ordnance (HERO)
- j. Tempest

- c. ACP 113
- d. ACP 112 & US Supp 1
- e. ACP 125
- f. ACP 124
- g. AKAI 6/16
- h. JANAP 119
- i. NWP 33

- .1 Describe the following call signs:
 - a. International
 - b. Military
 - c. Voice
 - d. Tactical
 - e. Collective
 - f. Conjunctive
 - g. Tactical changing
- .2 State the purpose of call signs.
- .3 Discuss call sign compromise and security precautions.

References:

a. NTP 3 AND US SUPP 1

- .1 Define the following functions used in preparing OCR messages:
 - a. Alignment
 - b. Tab stops
 - c. Header line blocks
 - d. Address components
 - e. Message text
 - f. Baseline blocks
 - g. Typewriter pitch
 - h. Typewriter ribbon
 - i. Authorized letters/numbers/symbols
 - j. Spacing
 - k. Margins
 - l. Re-addressals
- .2 Describe the methods of preparing DD-173 forms.
- .3 Explain the methods of correcting DD-173 forms.
- .4 Explain the requirements for preparing multipage messages.
- .5 Explain multisectional DD-173 message preparation.
- .6 Explain re-addressal preparation of DD-173 forms.
- .7 Explain multisectional DD-173 re-addressal.

- .1 State the purpose of QC.
- .2 Define the following terms as applied to QC:
- a. Baud rate/words per minute (WPM)
 - b. Carrier suppression
 - c. Signal-to-noise ratio
 - d. Characteristic distortion
 - e. Bias distortion
 - f. End distortion
 - g. Fortuitous distortion
 - h. Spacing bias
 - i. Marking bias
 - j. Crosstalk/overmodulation
 - k. Frequency/shift keying
 - l. High-level keying
 - m. Low-level keying
 - n. Synchronous mode
 - o. Digital
 - p. Start-stop mode
 - q. Lissajous pattern
 - r. No signal condition
 - s. Bits
 - t. Analog
 - u. Audio level
 - v. Decibel (dB)
 - w. Phase-shift keying (PSK)
- .3 State the requirements for performing quality control checks up activation of radio communications circuits.

References:

- a. Radioman 3 & 2 (NAVEDTRA 10228)
- b. Radioman 1 & C (NAVEDTRA 10229)
- c. NTP 2, Sec 2(B)
- d. NTP 6
- e. Shipboard Antenna Radiation Patterns
- f. Shipboard Antenna Systems
- g. Electronics Material Officer's Guide to Shipboard Electromagnetic Interference Control

- .1 Describe the locations and functional use of local shipboard communication antennas.
- .2 Define the following as applied to radio signals:
 - a. Hertz (Hz)
 - b. Kilohertz (kHz)
 - c. Megahertz (MHz)
 - d. Gigahertz (GHz)
 - e. Frequency (freq)
- .3 Define the following antenna-related terms:
 - a. Omnidirectional
 - b. Bidirectional
 - c. Unidirectional
 - d. Polarization
 - e. Field strength
 - f. Voltage standing-wave ratio (VSWR)
 - g. Directivity
 - h. Standing wave
 - i. Wave length
 - j. Radiation pattern
 - k. Megger
 - l. Half-wave
 - m. Electrical length
 - n. Beamwidth
- .4 Define the following abbreviations and state the frequency range of each:
 - a. Extremely-low frequency (ELF)
 - b. Very-low frequency (VLF)
 - c. Low frequency (LF)
 - d. Medium frequency (MF)
 - e. High frequency (HF)
 - f. Very-high frequency (VHF)
 - g. Ultrahigh frequency (UHF)
 - h. Super-high frequency (SHF)
 - i. Extremely-high frequency (EHF)
- .5 Describe ionospheric layers and their effects on propagation.

- c. Space
 - d. Sky
- .7 Define the following terms and describe the effect of each on propagation:
- a. Attenuation
 - b. Conductivity
 - c. Critical frequency
 - d. Diffraction
 - e. Fading
 - f. Maximum usable frequency (MUF)
 - g. Noise
 - h. Frequency of optimum traffic (FOT)
 - i. Lowest usable frequency (LUF)
 - j. Reflection
 - k. Refraction
 - l. Sunspots
 - m. Skip distance
 - n. Skip zone
 - o. Selective fading
 - p. Multipath fading
 - q. Ducting
 - r. Low probability intercept
 - s. Limited range scintillation
 - t. Sudden ionospheric disturbance (SID)
 - u. Scintillation
- .8 Explain the meaning of each element of an emission designator.
- .9 Describe the following frequency usage terms:
- a. Rounding off
 - b. Assigned frequency
 - c. Operating (window) frequency
 - d. Suppressed carrier frequency
- .10 Describe the sources for the following types of electromagnetic interference (EMI):
- a. Natural
 - b. Functional
 - c. Incidental
 - d. Hull-generated
- .11 Define the following as it relates to EMI:
- a. Intermodulation interference (IMI)
 - b. Nonlinear junction
 - c. Ferromagnetic metal
 - d. Bonding

- c. Communications Information Bulletins (CIBs)
- .1 Define and discuss the following in relation to SATCOM:
- a. Gapfiller/FLTSATCOM/LEASAT
 - b. Operational management
 - c. Defense satellite communications system (DSCS)
 - d. Naval telecommunications
 - e. Transponders
 - f. Officer in tactical command information exchange system (OTCIXS)
 - g. Submarine/satellite information exchange system (SSIXS)
 - h. Fleet secure voice communications (FLTSEVOCOM)
 - i. Common user digital information exchange system (CUDIXS)
 - j. Broadcast
 - k. Fleet satellite communications (FLTSATCOM)
 - l. Azimuth
 - m. Elevation
 - n. Footprint
 - o. Phase-shift keying (PSK)
 - p. Time division multiplexing (TDM)
 - q. Frequency-modulated (FM) voice
 - r. Differential encoded phase-shift keying (DPSK)
 - s. Bits per second (BPS)
 - t. Sole access
 - u. High data rate (HDR)
 - v. Low data rate (LDR)
 - w. DBW
 - x. Uplink
 - y. Downlink
 - z. Effective isotropic radiated power (EIRP)
 - aa. Frequency division/time division/spread spectrum multiple access (FDMA/TDMA/SSMA)
 - ab. Tactical intelligence (TACINTEL)
 - ac. Zone of mutual visibility (ZMV)
 - ad. Narrow-band
 - ae. Wideband
 - af. Power factor
 - ag. Navy modular automated communications systems (NAVMACS)
 - ah. Demand assigned multiple access (DAMA)
- .2 Describe and discuss the type of orbit of communications satellites.
- .3 Identify the number, position and coverage provided by each communications satellite used by your ship.
- .4 Identify the number of wideband and narrow-band channels in Gapfiller and FLTSATCOM/LEASAT satellites.

- .5 Explain the meaning of the following:
 - a. Azimuth elevation determining
 - b. Channel selection
 - c. Mode selection
 - d. Satellite acquisition
- .6 Describe the special reporting requirements for Gapfiller and FLTSATCOM/LEASAT satellites.
- .7 Identify the power available in each narrow-band and wideband channel of Gapfiller, FLTSATCOM and LEASAT satellites.

References:

- a. Computer Program Operators' Manual for NAVMACS
(CPOM NAVMACS 2D7.1)

.1 Define the following:

- a. Address screening
- b. Baud
- c. Control message
- d. Link
- e. Parameter
- f. Primary subscriber
- g. Special subscriber
- h. Program
- i. Transmit queue
- j. Power fault
- k. Overtemperature fault
- l. Program fault
- m. Command guard list
- n. Reduced command guard list
- o. Net cycle
- p. Local routing list
- q. Patches
- r. Command validation number

.2 Identify and define the following abbreviations:

- a. BCN
- b. BCST
- c. CPU
- d. CSN
- e. CTTY
- f. CUDIXS
- g. EMCON
- h. FLTSATCOM
- i. I.G.
- j. NAVMACS
- k. SOL
- l. Trabort
- m. CANTCO
- n. INOP
- o. MSL

b. ARQ
c. BIn
d. Bod
e. CAN
f. CDN
g. CGL
h. CLR
i. CUP
j. DLT
k. EDN
l. EMC
m. EUP
n. HLD
o. LK
p. NOB
q. NOM
r. OMN
s. OON
t. OTO

v. FWD
w. QRK
x. RPL
y. RRM
z. SID
aa. SPB
ab. SPD
ac. SPL
ad. SPP
ae. TIM
af. TP
ag. TR
ah. TRA
ai. TRQ
aj. TT
ak. WML
al. MSG
am. CID

.4 Discuss the purpose of the following program symbols:

a. !
b. !!
c. ?
d. #
e. ???
f. \$\$\$

.5 Discuss the purpose of the following program loading functions:

a. Y
b. S
c. K
d. C
e. P
f. N
g. U

.6 Discuss the following operations:

a. Setting EMCON
b. Input commands
c. CGL BCST screen options

.1 Define the following:

- a. Address screening
- b. Baud
- c. Link
- d. Parameter
- e. Primary subscriber
- f. Special subscriber
- g. Program
- h. Que readability signal (QRS) levels
- i. Order wire
- j. Transmit queue
- k. Power fault
- l. Program fault
- m. Command guard list
- n. Net cycle
- o. Memory loss
- p. System stop
- q. Automated repeat query (ARQ) settings
- r. Rerun message

.2 Identify and describe the following abbreviations:

- | | |
|---------------|--------------|
| a. BCN | j. EMCON |
| b. BCST | k. FLTSATCOM |
| c. CPU | l. NCS |
| d. CSN | m. I.G. |
| e. CTTY | n. SOL |
| f. KVDT | o. RATS |
| g. MIPC | p. NAVMACS |
| h. XMIT ABORT | q. CANTCO |
| i. FPT | r. CID |

.3 Discuss contingency steps to be taken as a result of the following casualty situations:

- a. Loss of CU1 or CU2
- b. Loss of CMTU1 or CMTU2
- c. Loss of MT1
- d. Loss of TR1
- e. Loss of TP1
- f. Loss of PR1 or PR2
- g. High-to-low/low-to-high level converter patch panel failure
- h. Mode-one/mode-two casualty operations
- i. Power fault recovery
- j. Overtemperature recovery
- k. Link failure

.4 Define the computer language codes (commands) used with the NAVMACS (V3) system as listed in the operators CPOM NAVMACS NTSIC 307.10.

- c. NETWORKS Fleet Telecommunications Substations
FTP LANT/MED/PAC/IO
- d. NTP 4
- e. NWP 4

.1 Describe the functions/purposes of the following:

- a. Command early warning net (CEWN)
- b. High command (HICOM) world-wide voice network
- c. Fleet tactical/warning net
- d. Harbor common (secure/unsecure)
- e. Tug control net
- f. Degaussing net
- g. Ultrahigh-frequency/high-frequency (UHF/HF) relay
- h. Interim command switchboard (ICSB)
- i. Submarine circuits
- j. Fleet flash net (FFN)
- k. Task Group Orestes (TGO)
- l. Underway replenishment (UNREP)
- m. Search and rescue (SAR)
- n. Naval tactical data system (NTDS) circuits

.2 Identify the following for voice nets/circuits listed in .1:

- a. Net control stations
- b. Net subscribers
- c. Requirements for guarding

- c. Radioman 3 & 2 (NAVEDTRA 10228)
- d. NWP 37

- .1 Discuss the following circuits, giving frequency, schedules and any unique operating procedures:
 - a. International calling and distress
 - b. International lifeboat, life raft and survival craft
 - c. Civil aeronautical distress very-high frequency (VHF)
 - d. Military aeronautical distress ultrahigh frequency (UHF)
- .2 Discuss distress circuit "guard" requirements.
- .3 Discuss the communication procedures to be followed when hearing a distress signal.
- .4 Discuss on-scene communications procedures during distress.
- .5 Discuss communications for terminating distress.
- .6 Discuss SUBLOOK/SUBMISS/SUBSUNK procedures.

References:

- a. Radioman 3 & 2 (NAVEDTRA 10228)
 - b. ACP 135
 - c. NWP 37
- .1 Identify the following as applied to onboard portable equipment
- a. Various types
 - b. Location
 - c. Intended purpose
 - d. Frequency range
 - e. Power source required for operation

References:

- a. NTP 9

.1 Describe the following types of commercial messages, stating the differences of each:

- a. Cablegram
- b. Domestic form
- c. International form

.2 Define the following:

- a. Class E messages
- b. Class D with E privileges
- c. Class E not involving tolls
- d. Class D messages

.3 Identify the following and describe how and where each is used:

- a. CK
- b. NL
- c. QSJ
- d. SRS
- e. NAVTELCOM 7210
- f. NAVTELCOM 2101
- g. COMLE
- h. Zip code

.4 State the duties of the commercial traffic clerk and explain how the assignment is made.

.5 State the purpose of the following administrative functions and describe the procedures for each:

- a. Remittance forwarding
- b. Abstracting
- c. Maintaining SRS log

.6 State the Class E refile points.

.7 State the rules regarding word count in heading, text and signature for the following:

- a. Domestic form
- b. International form

- a. 21MC/interior voice communication switch (IVCS)
- b. Sound-powered telephones
- c. Ship's service telephones
- d. Pneumatic tubes
- e. JX circuit
- f. X6J circuit

References:

- a. NTP 4
- b. Ship's Organization and Regulations Manual (SORM)
- c. NWP 4

.1 Discuss the functions of the following:

- a. Message Processing Center (MPC)
- b. Facilities control (FACCON)
- c. Signal bridge

.2 Discuss the functions of the following communications watchstations:

- a. Message Reproduction/Distribution Clerk
- b. Tape cutter
- c. File Clerk
- d. Communications Publication Correction Clerk
- e. Fleet Broadcast Operator
- f. Full-Period Termination Operator
- g. Ship-to-Ship/Ship-to-Shore Operator
- h. Out-Router
- i. In-Router
- j. Service Clerk
- k. Traffic Checker
- l. Continuous-Wave (CW) Operator
- m. Radio Supervisor
- n. Facilities Control Supervisor
- o. Message Center Supervisor
- p. Signal Messenger/Recorder
- q. Signal Spotter
- r. Searchlight Operator
- s. Signaller of the Watch
- t. Signal Supervisor
- u. Flag Bag Operator
- v. Communications Watch Officer

.3 Describe the functional relationships of communications to the following departments/individuals:

- a. Operations
- b. Navigation
- c. Weapons
- d. Engineering
- e. Supply
- f. Deck
- g. Air
- h. Medical/dental
- i. Executive Officer (XO)
- j. Commanding Officer (CO)
- k. Combat systems

d. G
e. K
f. M
g. N
h. P
i. R
j. S
k. U
l. V
m. W
n. Y
o. VV

- .1 Locate and identify the power distribution panels as applied to your communications spaces.

References:

- a. ACP 131
- b. NTP 2
- c. NTP 3
- d. NTC 4
- e. NTP 6, Supp 1
- f. Radioman 3 & 2 (NAVEDTRA 10228)
- g. Radioman 1 & C (NAVEDTRA 10229)
- h. Area Communications Information Bulletin (CIB)
- i. OPORD/OPLAN/COMM Annex
- j. Local Standard Operating Procedures (SOP)
- k. Shipboard Communications Systems Quality Monitoring (NAVTELCOMINST C2796.1)

.1 Define and discuss the following:

- a. NECOS
- b. RATT
- c. FSK
- d. Tone MOD
- e. SDUX
- f. HDUX
- g. FDUX
- h. VFCT
- i. Mark and space
- j. AFTS
- k. RFCS

.2 Describe the logs and files that must be maintained by facilities (FACCON).

.3 Define and discuss the following:

- a. Prosigns
- b. Operating signals
- c. Circuit discipline
- d. Watch turnover
- e. Traffic channels
- f. Termination shift
- g. Terminating naval communications station (NAVCOMMSTA)
- h. Send monitor
- i. Receive monitor
- j. Termination frequency
- k. Pilot frequency program
- l. Frequency prediction aids

.4 Discuss the following nets:

- a. Task Group Orestes (TGO)
- b. Ship-to-shore (S/S)
- c. Special
- d. Air-to-ground
- e. Underway replenishment (UNREP)

- .5 Describe the procedures for ultrahigh-frequency/high-frequency (UHF/HF) relays.
- .6 Describe multiplex as applied to naval communications.
- .7 Discuss the following as applied to multiplex signals:
 - a. Time division
 - b. Frequency division
 - c. Narrow band
 - d. Space diversity
 - e. Radiofrequency diversity
 - f. Tone diversity
 - g. Tone space diversity
 - h. Tone radiofrequency diversity
 - i. Low-frequency (LF) multichannel broadcast
 - j. Demand assigned multiple access (DAMA)
- .8 Define the following multiplex terms and abbreviations:
 - a. AFTS
 - b. Tone
 - c. Composite tones
 - d. Tone package
 - e. Channel
 - f. Keyer
 - g. Converter
 - h. Tone diversity
 - i. Frequency diversity
 - j. Space diversity
 - k. Twinned
 - l. Twin-up
 - m. Idle-out
 - n. Four diversity
 - o. Quad
 - p. Simo key
 - q. VFCT
- .9 Discuss channel frequency, mark and space frequency, channel separation, and guard band.
- .10 Define and discuss the following:
 - a. Link 4
 - b. Link 11
 - c. Link 14
 - d. HF frequency shift-keying (FSK) fleet broadcast
 - e. HF multichannel fleet broadcast
 - f. Satellite fleet broadcast
 - g. LF broadcast/submarine broadcast
 - h. TACAN
 - i. Homer
 - j. Code 17 procedures
 - k. Guerrilla procedures

- .1 Define and discuss the following as applied to tactical UHF relay pod:
 - a. Transponders
 - b. Elevation
 - c. Footprint
 - d. Uplink
 - e. Downlink
 - f. Zone of mutual visibility (ZMV)
 - g. Aircraft orbit
 - h. Channel frequency offset
- .2 Identify and discuss the available relay channels.
- .3 Describe and discuss procedures for accessing the relay pod.
- .4 Define and discuss maximum range of communications versus height of relay pod.
- .5 Identify maximum power available in each relay pod channel.
- .6 Describe procedures utilized in activating ship's UHF equipment in relation to relay pod operations.

References:

- a. Navy Safety Precautions for Forces Afloat (OPNAVINST 5100.19)
- b. Standard Organization and Regulations of the U.S. Navy (OPNAVINST 3120.32)
- c. Radioman 1 & C (NAVEDTRA 10229)
- d. Radioman 3 & 2 (NAVEDTRA 10228)
- e. Navy Electricity and Electronics Training Series (Module 1) (NAVEDTRA 172-01-00-79)
- f. Ship's Organization and Regulations Manual (SORM)
- g. Accident Prevention Manual (OPNAVINST 5101.2)
- h. Electronics Installation and Maintenance Book (EIMB), Chap 3 (NAVSEA 0967-LP-000-0100)
- i. NAVSEAINST 9310.1A
- j. Electronics Installation and Maintenance Book (EIMB), Chap 3 (NAVSEA SE000-00-EIM-100)

- .1 Explain how various levels of potential affect current flow through the body.
- .2 Explain how variations in environmental conditions affect body resistance.
- .3 Explain how electrical shock can be prevented when working on an energized circuit.
- .4 Explain how insulating material is used to protect personnel.
- .5 Describe the proper procedures to be observed when using test equipment on energized circuits.
- .6 Describe the proper procedure to be followed prior to working on electrical machinery or equipment.
- .7 Explain how a shorting bar is used to discharge electrical components.
- .8 Explain the use of interlocks installed in/on electrical equipment.
- .9 Explain the procedure to be followed when measuring extremely high voltage.
- .10 Explain the purpose and use of tag-out procedures.
- .11 Describe the procedure for replacing fuses using fuse pullers.
- .12 Describe the safety precautions applicable to portable electrical equipment.
- .13 Describe the danger of open electrical circuits due to environmental conditions.
- .14 Explain the procedures to be followed when combating an electrical fire.

for electrical equipment.

- .17 Describe the hazards that can be encountered with cleaning agents due to environmental conditions.
- .18 Discuss "man aloft" procedures.
- .19 Discuss the contents of Chapter 7 of the Standard Organization and Regulations of the U.S. Navy.
- .20 Discuss the eight basic accident cause factors as defined in the Accident Prevention Manual.
- .21 Identify qualified cardiopulmonary resuscitation (CPR) personnel.
- .22 Describe the hazards associated with lithium batteries.
- .23 Describe the procedures for handling, stowing and disposing of lithium batteries.

References:

- a. Manufacturer's Technical Manual

201.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual equipment.

201.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the modes of operation and control?

	A	B	C
	X	X	
.21 Keyboard	X	X	X
a. Mode selector switch	X	X	X
b. Typing and on-line function keys (32)	X	X	
c. Local line feed key	X	X	
d. Local carriage return key	X	X	
e. Line break key	X	X	
f. Repeat key	X	X	
g. Tape backspace key	X	X	
h. Send key	X	X	
i. Receive key	X	X	
.22 Automatic typer (printer)	X	X	
a. Paper feed	X	X	
b. Ribbon feed	X	X	
c. Type box	X	X	
d. Range finder	X	X	
.23 Perforator	X	X	
a. Tape feed	X	X	
b. Tape holder and reel	X	X	
c. Ribbon feed	X	X	
.24 Reperforator	X	X	
a. Tape feed	X	X	
b. Tape holder and reel	X	X	
c. Ribbon feed	X	X	
d. Tape-out switch	X	X	
e. Range finder	X	X	
.25 Transmitter-distributor	X	X	
a. Control lever	X	X	
b. Tape feed	X	X	
.26 Cabinet	X	X	
a. Margin indicator lamp	X	X	
b. Copy lamps (2)	X	X	
c. Offset copy holder	X	X	
d. Designation plate	X	X	
e. On/off switch	X	X	
f. Perforator lamp	X	X	

- a. Loss of primary TTY power
- b. Loss of direct-current (DC) power supply to either TTY or reperforator
- c. Loss of signal

.52 How does this system interface with the patch panel?

5201.6 SAFETY PRECAUTIONS - None to be discussed.

- b. FIP LANT/MED/PAC/IO
- c. NTP 4

02.1 What is the function of this system?

- .11 Draw a diagram of this system showing all components listed below.

02.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?

- .21 Receive antenna
- .22 Receive antenna patch panel
- .23 Receive antenna filter/coupler
- .24 Receiver
- .25 Receiver transfer switchboard (patch panel)
- .26 Converter/comparator group
- .27 Black direct-current (DC) patch panel
- .28 Associated crypto devices
- .29 Red DC patch panel
- .210 Teletype set (printer/reperforator)

02.3 PRINCIPLES OF OPERATION

- .31 Describe how the operation of each component affects the signal.
- .32 State the component substitution required to shift from high frequency (HF) to low frequency/medium frequency (LF/MF).

02.4 PARAMETERS

For the items listed answer the following questions:

- A. What are the normal operating values and tolerances?

- .41 Receiver audio output level
- .42 Black DC loop current
- .43 Red DC loop current

02.5 SYSTEM INTERFACE - None to be discussed.

02.6 SAFETY PRECAUTIONS - None to be discussed.

5203.1 What is the function of this system?

.11 Draw a diagram of this system showing all components listed

5203.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

.21 Receive antenna

.22 Receive antenna patch panel

.23 Receive antenna filter/coupler

.24 Radio receiver (low-frequency/medium-frequency/high-frequency/ultrahigh-frequency (LF/MF/HF/UHF))

.25 Receiver transfer switchboard (patch panel)

.26 Multichannel terminal

.27 Black direct-current (DC) patch panel

.28 Associated crypto devices

.29 Timing switching panel

.210 Red DC patch panel

.211 Teletype (printer/reperforator)

5203.3 PRINCIPLES OF OPERATION

.31 Describe how the operation of each component affects the signal

5203.4 PARAMETERS

For the items listed answer the following questions:

A. What are the normal operating values and tolerances?

.41 Receiver audio output level

.42 Red DC loop current

.43 Black DC loop current

5203.5 SYSTEM INTERFACE

.51 How does loss of a satellite affect this system?

5203.6 SAFETY PRECAUTIONS - None to be discussed.

References:

- a. NAVSEA 0967-LP-301-7020

5204.1 What is the function of this system?

- .11 Draw a diagram of this system showing all components listed below.

5204.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
B. Where is it located?

- .21 Receive antenna
- .22 Receive antenna patch panel
- .23 Receive antenna filter/coupler
- .24 Receiver (medium-frequency/high-frequency/
ultrahigh-frequency (MF/HF/UHF))
- .25 Receiver transfer switchboard (patch panel)
- .26 Converter/comparator group
- .27 Black direct-current (DC) patch panel
- .28 Teletype (printer/reperforator)

5204.3 PRINCIPLES OF OPERATION

- .31 Describe how the operation of each component affects the signal.

5204.4 PARAMETERS

For the items listed answer the following questions:

- A. What are the normal operating values and tolerances?

- .41 Receiver audio output level
- .42 Black DC loop current

5204.5 SYSTEM INTERFACE - None to be discussed.

5204.6 SAFETY PRECAUTIONS - None to be discussed.

- 5205.1 What is the function of the system?
- .11 Draw a diagram of this system showing all components listed below.
- 5205.2 SYSTEM COMPONENTS AND COMPONENT PARTS
- Discuss the designated items for the following components and component parts:

- A. What is its function?
B. Where is it located?

- .21 Receive antenna
- .22 Receive antenna patch panel
- .23 Receive antenna filter/coupler
- .24 Receiver (medium-frequency/high-frequency/ultrahigh-frequency (MF/HF/UHF))
- .25 Receiver transfer switchboard (patch panel)
- .26 Tone terminal equipment (send/receive)
- .27 Black direct-current (DC) patch panel
- .28 Associated crypto devices
- .29 Red DC patch panel
- .210 Teletype printer/reperforator
- .211 Teletype keyboard/transmitter-distributor (TD)
- .212 Crypto remote control transfer panel
- .213 Crypto remote control
- .214 Transmitter transfer switchboard (patch panel)
- .215 Transmitter (MF/HF/UHF)
- .216 Transmitter coupler
- .217 Transmitter antenna patch panel
- .218 Transmitter antenna

5205.3 PRINCIPLES OF OPERATION

- .31 Describe how the operation of each component affects the signal.

5205.4 PARAMETERS

For the items listed answer the following questions:

- A. What are the normal operating values and tolerances?

- .41 Receiver audio output level
- .42 Tone terminal equipment receive audio level
- .43 Tone terminal equipment send level
- .44 Black DC loop current
- .45 Red DC loop current
- .46 Transmit power
- .47 Voltage standing-wave ratio (VSWR) (MF/HF)

5205.5 SYSTEM INTERFACE - None to be discussed.

5205.6 SAFETY PRECAUTIONS - None to be discussed.

- .11 Draw a diagram of this system showing all components listed below.
- 5206.2 SYSTEM COMPONENTS AND COMPONENT PARTS
- Discuss the designated items for the following components and component parts:
- A. What is its function?
B. Where is it located?
- .21 Receive antenna
 - .22 Receive antenna patch panel
 - .23 Receive antenna filter/coupler
 - .24 Receiver (medium-frequency/high-frequency ultrahigh-frequency (MF/HF/UHF))
 - .25 Receiver transfer switchboard (patch panel)
 - .26 Tone terminal equipment (2)
 - .27 Black direct-current (DC) patch panel
 - .28 Associated crypto devices (2)
 - .29 Red DC patch panel
 - .210 Teletype printer/reperforator
 - .211 Teletype keyboard/transmitter-distributor (TD)
 - .212 Crypto remote control transfer panel
 - .213 Crypto remote control
 - .214 Transmitter transfer switchboard (patch panel)
 - .215 Transmitter (MF/HF/UHF)
 - .216 Transmitter coupler
 - .217 Transmitter antenna (patch panel)
 - .218 Transmitter antenna

5206.3 PRINCIPLES OF OPERATION

- .31 Describe how the operation of each component affects the signal.

5206.4 PARAMETERS

For the items listed answer the following questions:

- A. What are the normal operating values and tolerances?

- .41 Receiver audio output level
- .42 Tone terminal equipment receive audio level
- .43 Tone terminal equipment send level
- .44 Black DC loop current
- .45 Red DC loop current
- .46 Transmit power
- .47 Voltage standing-wave ratio (VSWR) (MF/HF)

206.6 SAFETY PRECAUTIONS - None to be discussed.

5207.1 What is the function of this system?

.11 Draw a diagram of this system showing all components listed below

5207.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

- .21 Receive antenna
- .22 Receive antenna patch panel
- .23 Receive antenna filter/coupler
- .24 Receiver
- .25 Receiver transfer switchboard (patch panel)
- .26 Converter/comparator group
- .27 Black direct-current (DC) patch panel
- .28 Associated crypto devices (2)
- .29 Red DC patch panel
- .210 Teletype printer/reperforator
- .211 Teletype keyboard/transmitter-distributor (TD)
- .212 Transmitter/teletype control
- .213 Crypto remote control transfer panel
- .214 Crypto remote control
- .215 Transmitter transfer switchboard (patch panel)
- .216 Transmitter
- .217 Transmitter coupler
- .218 Transmitter antenna patch panel
- .219 Transmitter antenna

5207.3 PRINCIPLES OF OPERATION

- .31 Describe how the operation of each component affects the signal
- .32 Describe the required component involvement when switching to CV-2460/SGC as an external frequency shift-keying (FSK) keyer

5207.4 PARAMETERS

For the items listed answer the following questions:

A. What are the normal operating values and tolerances?

- .41 Receiver audio output level
- .42 Black DC loop current
- .43 Red DC loop current
- .44 Transmit power
- .45 Voltage standing-wave ratio (VSWR)

5207.6 SAFETY PRECAUTIONS - None to be discussed.

5208.1 What is the function of this system?

.11 Draw a diagram of this system showing all components listed

5208.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

- .21 Receive antenna
- .22 Receive antenna patch panel
- .23 Receive antenna filter/coupler
- .24 Receiver
- .25 Receiver transfer switchboard (patch panel)
- .26 Converter/comparator group
- .27 Black direct-current (DC) patch panel
- .28 Associated crypto devices (2)
- .29 Red DC patch panel
- .210 Teletype printer/reperforator
- .211 Teletype keyboard/transmitter-distributor (TD)
- .212 Transmitter/teletype control
- .213 Crypto remote control transfer panel
- .214 Crypto remote control
- .215 Transmitter transfer switchboard (patch panel)
- .216 Transmitter
- .217 Transmitter coupler
- .218 Transmitter antenna patch panel
- .219 Transmitter antenna

5208.3 PRINCIPLES OF OPERATION

- .31 Describe how the operation of each component affects the system
- .32 Describe the required component involvement when switching CV-2460/SGC as an external frequency shift-keying (FSK) key

5208.4 PARAMETERS

For the items listed answer the following questions:

A. What are the normal operating values and tolerances?

- .41 Receiver audio output level
- .42 Black DC loop current
- .43 Red DC loop current
- .44 Transmit power
- .45 Voltage standing-wave ratio (VSWR)

5208.6 SAFETY PRECAUTIONS - None to be discussed.

5209.1 What is the function of this system?

- .11 Draw a diagram of this system showing all components listed below.

5209.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
B. Where is it located?
C. What are the positions and functions of each position?

	A	B	C
.21 Transceiver antenna	X	X	
.22 Transceiver antenna coupler	X	X	
.23 Transceiver (very-high frequency/ultrahigh frequency (VHF/UHF))	X	X	
.24 Switching unit	X	X	
.25 Receiver transfer switchboard (patch panel)	X	X	
.26 Interconnection box	X	X	
.27 Associated crypto devices	X	X	X
.28 Associated crypto device power supply	X	X	
.29 Impedance-matching device	X	X	
.210 Remote switchboard	X	X	
.211 Secure phone	X	X	
a. Speaker switch	X	X	X
b. Indicators/controls	X	X	X
.212 Speaker-amplifiers	X	X	
.213 Transmitter transfer switchboard (patch panel)	X	X	
.214 Control adapter	X	X	
.215 Remote control unit	X	X	X

5209.3 PRINCIPLES OF OPERATION

- .31 Describe how the operation of each component affects the signal.

5209.4 PARAMETERS

- .41 What are the normal operating values and tolerances of audio levels?

5209.5 SYSTEM INTERFACE - None to be discussed.

5209.6 SAFETY PRECAUTIONS - None to be discussed.

References:

- a. NTP 5
- b. NAVSEA 0967-LP-301-7020

5210.1 What is the function of this system?

- .11 Draw a diagram of this system showing all components listed below.

5210.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

	A	B	C
.21 Receive antenna	X	X	
.22 Receive antenna coupler	X	X	
.23 Receive antenna patch panel	X	X	
.24 Receiver (medium-frequency/high-frequency (MF/HF))	X	X	
.25 Receiver transfer switchboard	X	X	
.26 Associated crypto devices	X	X	
.27 Remote switching matrix	X	X	
.28 Secure phone	X	X	X
.29 Speakers-amplifiers	X	X	
.210 Remote switchboard	X	X	X
.211 Transmitter transfer switchboard	X	X	
.212 Transmitter (MF/HF)	X	X	
.213 Transmitter antenna coupler	X	X	
.214 Transmitter antenna	X	X	

5210.3 PRINCIPLES OF OPERATION

- .31 Describe how the operation of each component affects the signal.

5210.4 PARAMETERS

For the items listed answer the following questions:

- A. What are the normal operating values and tolerances?

- .41 Audio levels
- .42 Voltage standing-wave ratio (VSWR)

5210.5 SYSTEM INTERFACE - None to be discussed.

5210.6 SAFETY PRECAUTIONS - None to be discussed.

5211.1 What is the function of this system?

.11 Draw a diagram of this system showing all components listed below.

5211.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

.21 Receive antenna

.22 Receive antenna coupler

.23 Receiver (very-high frequency/ultrahigh-frequency (VHF/UHF))

.24 Receiver transfer switchboard (patch panel)

.25 Control unit

.26 Amplifier (speaker)

.27 Handset

.28 Transmitter transfer switchboard (patch panel)

.29 Control adapter

.210 Transmitter (VHF/UHF)

.211 Transmitter coupler

.212 Transmitter antenna

5211.3 PRINCIPLES OF OPERATION

.31 Describe how the operation of each component affects the signal.

5211.4 PARAMETERS

.41 What are the normal operating values and tolerances of audio levels?

5211.5 SYSTEM INTERFACE - None to be discussed.

5211.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVTELCOMINST C2796.1

What is the function of this system?

Draw a diagram of this system showing all components listed below.

SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

Receive antenna

Receive antenna patch panel

Receive antenna coupler/filter

Receiver (medium-frequency/high-frequency (MF/HF))

Receiver transfer switchboard (patch panel)

Control unit

Amplifier (speaker)

Handset

Transmitter transfer switchboard (patch panel)

Transmitter (MF/HF)

Transmitter antenna patch panel

Transmitter antenna coupler

Transmitter antenna

PRINCIPLES OF OPERATION

Describe how the operation of each component affects the signal.

PARAMETERS

For the items listed answer the following questions:

A. What are the normal operating values and tolerances?

Audio level

Voltage standing-wave ratio (VSWR)

SYSTEM INTERFACE - None to be discussed.

SAFETY PRECAUTIONS - None to be discussed.

5213.1 What is the function of this system?

.11 Draw a diagram of this system showing all components listed below

5213.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the modes of operation or control?

	A	B	C
.21 Receive antenna	X	X	
.22 Receive antenna patch panel	X	X	
.23 Receive antenna coupler/filter	X	X	
.24 Receiver transfer switchboard (patch panel)	X	X	
.25 Receiver	X	X	X
.26 Receive terminal equipment	X	X	X
.27 Black direct-current (DC) patch panel	X	X	
.28 Receive associated crypto device	X	X	X
.29 Red DC patch panel	X	X	
.210 Teletype printer/reperforator	X	X	X
.211 Teletype keyboard/transmitter distributor (TD)	X	X	
.212 Crypto remote control transfer panel	X	X	
.213 Crypto remote control	X	X	X
.214 Red DC patch panel	X	X	
.215 Send associated crypto device	X	X	X
.216 Black DC patch panel	X	X	
.217 Send terminal equipment	X	X	X
.218 Tone diversity switchboard	X	X	
.219 Transmitter transfer switchboard (patch panel)	X	X	
.220 Transmitter	X	X	X
.221 Transmitter coupler	X	X	
.222 Transmitter antenna patch panel	X	X	
.223 Transmitter antenna	X	X	

5213.3 PRINCIPLES OF OPERATION

.31 Describe how the operation of each component affects the signal

5213.4 PARAMETERS

For the items listed answer the following questions:

A. What are the normal operating values?

- .41 Receiver audio output level
- .42 Black DC loop current

transmit power

5 SYSTEM INTERFACE - None to be discussed.

5 SAFETY PRECAUTIONS - None to be discussed.

.11 Draw a diagram of this system showing all components listed below.

5214.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?

- .21 Receive antenna
- .22 Receive antenna patch panel
- .23 Receive antenna coupler/filter
- .24 Receiver (medium-frequency/high-frequency (MF/HF))
- .25 Receiver transfer switchboard (patch panel)
- .26 Jackbox/speaker-amplifier
- .27 Telegraph key
- .28 Transmitter transfer switchboard (patch panel)
- .29 Transmitter (MF/HF)
- .210 Transmitter patch panel
- .211 Transmitter coupler
- .212 Transmitter antenna

5214.3 PRINCIPLES OF OPERATION

- .31 Describe how the operation of each component affects the signal.

5214.4 PARAMETERS

- .41 What are the normal operating values and tolerances of the voltage standing-wave ratio (VSWR)?

5214.5 SYSTEM INTERFACE - None to be discussed.

5214.6 SAFETY PRECAUTIONS - None to be discussed.

- What is the function of this system?
- 11 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following component and component parts:

- A. What is its function?
 B. Where is it located?
 C. What are the modes of operation or control?
 D. What are the positions and functions of each position?

	A	B	C	D
21 AN/WSC-3 satellite radio set	X	X	X	
a. Built-in test (BIT) meter	X	X		X
b. Test select switch	X	X		X
c. Test switch	X	X		X
d. Data signal-acquired (sig ACQ) indicator	X	X		
e. Malfunction indicator	X	X		
f. Carrier-on indicator	X	X		
g. Test key switch	X	X		X
h. Handset	X	X		
i. Radiofrequency (RF) power meter	X	X		
j. RF power switch	X	X		X
k. Volume control	X	X		X
l. Squelch switch	X	X		X
m. Power level control	X	X		X
n. Power level lock control	X	X		X
o. Modulation control	X	X		X
p. Manual frequency select switch	X	X		X
q. Operate time meter	X	X		
r. Frequency select switch	X	X		X
s. Communication mode switch	X	X		X
t. Standby indicator	X	X		
u. Primary power indicator	X	X		
v. Standby/operate switch	X	X		X
w. Power switch	X	X		X
x. Preset switch	X	X		X
y. Preset memory/preset channel switch	X	X		X
z. Control switch	X	X		X
aa. 15-amp fuse indicator	X	X		
ab. SATCOM receiver off-set switch	X	X		X
22 Antenna control (C-9597/WSC-1(V))	X	X	X	
a. Power indicator	X	X		
b. Power switch	X	X		X
c. 2-amp fuse	X	X		

	j. Azimuth control	X X	
	k. Antenna blocked indicator	X X	
	l. Coaxial pressure indicator	X X	
	m. Phone	X X X	
.23	Remote control (C-9531/WSC-3)	X X X	
	a. Data sig ACQ indicator	X X	
	b. SATCOM mode indicator	X X	
	c. Carrier-on indicator	X X	
	d. Manual frequency select indicator	X X	X
	e. Equipment-on indicator	X X	
	f. Modulation switch	X X	
	g. Preset channel switch	X X	X
	h. Headset	X X	
	i. Volume control	X X	
.24	Gyro control set	X	X X
.25	Satellite antenna (OC-02)	X X	

5215.3 PRINCIPLES OF OPERATION - None to be discussed.

5215.4 PARAMETERS - None to be discussed.

5215.5 SYSTEM INTERFACE - None to be discussed.

5215.6 SAFETY PRECAUTIONS - None to be discussed.

11 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the modes of operation or control?
- D. What are the positions and functions of each position?

		A	B	C	D
21	Combiner-demodulator (MD-900/SSR-1)	X	X	X	
	a. Channel disabled indicator	X	X		
	b. Test select switch	X	X		X
	c. Alternating-current (AC) power indicator	X	X		
	d. Power switch	X	X		
	e. Output monitor jack	X	X		
	f. Preselector-down converter (channels 1 thru 4)	X	X		
	g. Combination fault indicator	X	X		
	h. Own ship course (OSC) fault indicator	X	X		
	i. Demodulator fault indicator	X	X		
	j. Direct-current (DC) fault indicator	X	X		
	k. Front panel meter	X	X		
	l. NORM/OFF/RLY switch (channels 1 thru 4)	X	X		X
	m. Demodulator mode switch	X	X		
	n. Channel select switch	X	X		X
	o. Lamp test switch	X	X		
	p. Gain adjust knob (channels 1 thru 4)	X	X		X
22	Demultiplexer (TD-1063/SSR-1)	X	X		
	a. Frame search status indicator	X	X		
	b. Data input status indicator	X	X		
	c. AC power indicator	X	X		
	d. AC power switch	X	X		
	e. Input monitor jack	X	X		
	f. Teletypewriter (TTY) SW-1/SW-2 fault indicator	X	X		
	g. DC fault indicator	X	X		
	h. Frame sync fault indicator	X	X		
	i. Built-in test (BIT) sync indicator	X	X		
	j. Lamp test switch	X	X		
23	Fault alarm panel (AN/SSR-1)	X	X		
	a. Supervisory targets indicator	X	X		
	b. Alarm targets indicator	X	X		
	c. MD-900/SSR-1 switch	X	X		X
	d. TD-1063/SSR-1 switch	X	X		X
	e. Fault alarm buzzer	X			
24	Antenna (AS-2815/SSR-1)	X	X		

- a. Loss of a satellite
- b. Shifting mode to frequency-modulated (FM) operations

.52 How does this system interface with the the Naval Modular Automated Communication System (NAVMACS)?

5216.6 SAFETY PRECAUTIONS - None to be discussed.

.11 Refer to a standard print of this system or to the actual equipment.

7.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What is the source of control signals?
- D. What are the positions and functions of each position?
- E. What are the interlocks?

		A	B	C	D	E
.21	Central processing unit (AN/UYK-20)	X	X	X		
	a. Blower on/off switch	X	X			
	b. Blower on/off indicator	X	X			
	c. Logic on/off switch	X	X			
	d. Logic on/off indicator	X	X			
	e. Power indicator	X	X			
	f. Power clear switch	X	X			
	g. Program indicator	X	X			
	h. Program clear switch	X	X			
	i. Program run indicator	X	X			
	j. Overtemperature indicator	X	X			
	k. Load/stop switch	X	X			
	l. Bootstrap half switch	X	X		X	
	m. Circuit breaker on/off switch	X	X			
	n. Battle short indicator	X	X			
	o. Battle short on/off switch	X	X			
	p. Audible alarm indicator	X	X			
	q. Enable/disable/test switch	X	X		X	
.22	Cartridge magnetic tape unit (AN/USH-26)	X	X			
	a. Enable/disable switch	X	X		X	
	b. Battle short switch	X	X		X	
	c. Alarm enable/off/test switch	X	X		X	
	d. Power on/off switch	X	X			
	e. On-line/off-line switch	X	X		X	
	f. Master clear switch	X	X			
	g. CMPTR1/MPX/CMPTR2 switch	X	X		X	
.23	Magnetic cassette unit (RD-396)	X	X	X		
	a. Power on/off switch and indicator	X	X			
	b. Recorder select switch	X	X		X	
	c. Recorder power on/off switch	X	X			
	d. On-line indicator	X	X			
	e. Rewind indicator	X	X			
	f. On-line/rewind switch	X	X		X	

	b. Rewind off/takeup switch	X X	
	c. Remote/dupe/test switch	X X	
	d. Punch/off/leader switch	X X	
	e. Tape error indicator	X X	
	f. Slew left/right switch	X X	
	g. On-line/load switch	X X	
	h. Read/start switch and indicator	X X	
.25	Medium-speed printers (2) (TT-624)	X X X	X
	a. Alternating-current (AC) power on/off switch	X X	
	b. Power on indicator	X X	
	c. Paper fault indicator	X X	
	d. Paper low indicator	X X	
	e. Form feed switch	X X	X
	f. Ready indicator	X X	
	g. On-off-line switch	X X	
	h. Off-line indicator	X X	
	i. Lamp intensity control	X X	
	j. 72-column/80-column switch	X X	X
	k. Alarm volume control	X X	
	l. Overtemperature indicator	X X	
	m. Master clear switch	X X	
	n. Print inhibit/print enable switch	X X	
	o. Parity ignore/parity detect switch	X X	
	p. In/out skipover switch	X X	
	q. Baud rate selector switch	X X	X
	r. Circuit breakers (4)	X X	
.26	Interconnecting group (ON-143)	X X X	
	a. Power on/off switch	X X	
	b. Crypto alarm/reset button	X X	
	c. Teletypewriter (TTY) status selector	X X	X
	d. Auto/manual switch	X X	X
	e. Receive indicator	X X	
	f. Transmit indicator	X X	
	g. Alarm indicator	X X	
	h. Vocoder operator switch	X X	
	i. Vocoder call switch	X X	
	j. Vocoder operator/test switch	X X	
	k. Vocoder voice indicator	X X	
	l. Vocoder data indicator	X X	
.27	Control teletypewriter	X X X	
.28	Level converter/patch panel (CV-3022)	X X	
.29	CUDIJS link crypto equipment	X X X	
.210	Satellite communications set (AN/WSC-3)	X X X	
.211	Direct-current (DC) red patch panel	X X	

- 31 Using a diagram of the system, show the path of:
- CUDIXS link received signals from the AN/WSC-3 antenna to the TT-624.
 - CUDIXS link send signals from the RD-397 to the AN/WSC-3 antenna.
 - Fleet broadcast signals from the crypto equipment to the TT-624.
- 4 PARAMETERS - None to be discussed.
- 5 SYSTEM INTERFACE
- 51 How do the following outside influences affect this system:
- Loss of gyro
 - Loss of air-conditioning
 - Loss of satellite
- 6 SAFETY PRECAUTIONS - None to be discussed.

5218.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What is the source of control signals?
- D. What are the positions and functions of each position?
- E. What are the interlocks?

		A	B	C	D	E
.21	Central processing units (2) (AN/UYK-20)	X	X	X		
	a. Circuit breaker on/off switch	X	X			
	b. Blower on/off switch	X	X			
	c. Blower on/off indicator	X	X			
	d. Logic on/off switch	X	X			
	e. Logic on/off indicator	X	X			
	f. Power fault clear switch	X	X			
	g. Power fault indicator	X	X			
	h. Program fault clear switch	X	X			
	i. Program fault switch	X	X			
	j. Program run indicator	X	X	X		
	k. Overtemperature indicator	X	X			
	l. Load/stop switch	X	X	X		
	m. Bootstrap load 1/2 position switch	X	X			
	n. Auto start/start switch	X	X			
	o. Battle short on/off switch	X	X			
	p. Battle short indicator	X	X			
	q. Audible alarm indicator	X	X			
	r. Enable/disable/test switch	X	X			
.22	Cartridge magnetic tape units (2) (AN/USH-26)	X	X	X		
	a. Enable/disable switch	X	X			
	b. Battle short switch	X	X			
	c. Alarm enable/off/test switch	X	X		X	
	d. Power on/off switch	X	X			
	e. On-line/off-line switch	X	X		X	
	f. Master clear switch	X	X			
	g. CMPTR1/MPX/CMPTR2 switch	X	X		X	
.23	High-speed perforated tape reader/punch (RD-397)	X	X	X		
	a. 5/8/7 level switch (inside equipment)	X	X	X		
	b. Thumbwheel on tape reader head	X	X		X	
	c. Power switch	X	X			
	d. Remote/dupe/test switch	X	X		X	
	e. On-line/load switch	X	X			
	f. Punch/off/leader switch	X	X		X	

24	Medium speed printers (2) (TT-624)	X	X	X	X
	a. Band rate selector switch	X	X		X
	b. Lamp intensity control	X	X		
	c. Alarm volume control	X	X		
	d. Overtemperature indicator	X	X		
	e. Master clear switch	X	X		
	f. 72-column/80-column switch	X	X		
	g. Skip over in/out switch	X	X		
	h. Circuit breakers (4)	X	X		X
	i. Print inhibit/print enable switch	X	X		
	j. Parity ignore/parity detect switch	X	X		
	k. Alternating-current (AC) power on/off switch	X	X		
	l. Power on indicator	X	X		
	m. Paper fault indicator	X	X		
	n. Paper low indicator	X	X		
	o. Form feed switch	X	X		
	p. Ready indicator	X	X		
	q. Off-line indicator switch	X	X		
	r. On-off-line indicators	X	X		
25	Interconnecting group (ON-143)	X	X	X	
	a. Power on/off switch	X	X		
	b. Crypto alarm/reset button	X	X		
	c. Teletypewriter (TTY) status selector switch	X	X		X
	d. Auto/manual switch	X	X		X
	e. Receive indicator	X	X		
	f. Transmit indicator	X	X		
	g. Alarm indicator	X	X		
	h. Vocoder voice indicator	X	X		
	i. Vocoder data indicator	X	X		
26	Keyboard visual display terminals (2) (AN/USQ-69)	X	X	X	
	a. Parity even/none switch	X	X		
	b. Battery test switch	X	X		
	c. Cont character	X	X		
	d. Keyboard lockout switch	X	X		
	e. Character mode	X	X		
	f. Master clear switch	X	X		
	g. Intensity control	X	X		
	h. Circuit breaker on/off switch	X	X		
	i. Power on switch	X	X		
	j. DC OPR switch	X	X		
	k. Blower switch	X	X		
	l. Battle short switch	X	X		
	m. Overtemperature indicator	X	X		
	n. Alarm enable/DSRL/test switch	X	X		X
27	Level converter/patch panel (CV-3022)	X	X	X	
28	CUDIXS link crypto equipment	X	X	X	
29	Full period termination crypto equipment	X	X	X	
210	Broadcast crypto equipment	X	X	X	

.31 Using a diagram of the system, show the path of:

- a. CUDIXS link received signals from the AN/WSC-3 antenna to the
- b. CUDIXS link send signals from KVDT to the AN/WSC-3 antenna.
- c. The fleet broadcast signals from the crypto equipment to the T
- d. Send/receive signals of the FPT circuits to and from the crypt
equipment.

5218.4 PARAMETERS - None to be discussed.

5218.5 SYSTEM INTERFACE

.51 How do the following outside influences affect this system:

- a. Loss of gyro
- b. Loss of air-conditioning
- c. Loss of satellite

5218.6 SAFETY PRECAUTIONS - None to be discussed.

11 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

	A	B	C
21 Antenna compensation (ANT COMP) control	X	X	
22 Antenna coupling (ANT CPLG) switch	X	X	X
23 Antenna fuse and spare	X	X	
24 Band selector switch	X	X	X
25 Main tuning control (AF-1Kc)	X	X	
26 Kilocycle (kc) tuning indicator	X	X	
27 1Kc tuning meter	X	X	
28 Radiofrequency (RF) gain control	X	X	
29 Secondary tuning control (TUNING)	X	X	
210 Cycles tuning indicator	X	X	
211 10-cycle tuning meter	X	X	
212 Upper-sideband (USB) audiofrequency (AF) level control	X	X	
213 USB automatic gain control (AGC) switch	X	X	X
214 USB output meter	X	X	
215 AM AF level control	X	X	
216 AM mode switch	X	X	X
217 AM bandwidth switch	X	X	X
218 AM noise limiter (NL) switch	X	X	X
219 AM output meter	X	X	
220 Lower-sideband (LSB) AF level control	X	X	
221 LSB AGC switch	X	X	X
222 LSB output meter	X	X	X
223 Primary power on/off switch	X	X	
224 Phone level control	X	X	
225 Resonance meter	X	X	
226 Line A phone jack	X	X	
227 Line B phone jack	X	X	
228 Primary power fuses (2)	X	X	

3 PRINCIPLES OF OPERATION - None to be discussed.

4 PARAMETERS - None to be discussed.

5 SYSTEM INTERFACE - None to be discussed.

6 SAFETY PRECAUTIONS - None to be discussed.

a. NAVSEA 0967-LP-035-1010

5220.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5220.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
.21 Band selector	X	X	X
.22 Tuning control	X	X	
.23 Calibration adjust	X	X	
.24 Antenna compensator	X	X	
.25 Antenna impedance	X	X	X
.26 Frequency vernier	X	X	
.27 Intermediate-frequency (IF) selectivity	X	X	X
.28 Beat-frequency oscillator (BFO)	X	X	X
.29 Audiofrequency (AF) selectivity switch	X	X	X
.210 Calibration on/off switch	X	X	X
.211 Noise limiter switch	X	X	X
.212 Output limiter switch	X	X	X
.213 Gain control knob	X	X	
.214 Primary power on/off switch	X	X	X
.215 Audio output control	X	X	
.216 Headphone level adjust knob	X	X	
.217 Tuning meter	X	X	
.218 Output meter	X	X	
.219 Fuses (2)	X	X	
.220 Dial lights (2)	X	X	
.221 Dial lock	X	X	
.222 Headphone jacks (2)	X	X	

5220.3 PRINCIPLES OF OPERATION - None to be discussed.5220.4 PARAMETERS - None to be discussed.5220.5 SYSTEM INTERFACE - None to be discussed.5220.6 SAFETY PRECAUTIONS - None to be discussed.

1.1 What is the function of this system?

1.11 Refer to the actual equipment.

1.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

	<u>A</u>	<u>B</u>	<u>C</u>
.21 Noise cancel toggle switch	X	X	
.22 Frequency shift key (FSK) sense selector switch	X	X	X
.23 Radiofrequency (RF) gain potentiometer	X	X	
.24 Automatic gain control (AGC) toggle switch	X	X	
.25 RF tuning control knob	X	X	
.26 Frequency dial	X	X	
.27 Cathode-ray tube (CRT) indicator	X	X	
.28 CRT toggle switch	X	X	
.29 Power switch	X	X	
.210 Bandwidth cycles-per-second (CPS) selector switch	X	X	X
.211 Lock control knob	X	X	
.212 Antenna selector	X	X	
.213 Audio level potentiometer	X	X	
.214 Audio jack	X	X	
.215 Audio toggle switch	X	X	

1.3 PRINCIPLES OF OPERATION - None to be discussed.

1.4 PARAMETERS - None to be discussed.

1.5 SYSTEM INTERFACE - None to be discussed.

1.6 SAFETY PRECAUTIONS - None to be discussed.

a. NAVSEA 0967-LP-063-2010

5222.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual e

5222.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
.21 Function selector switch	X	X	X
.22 Beat-frequency oscillator (BFO) switch	X	X	X
.23 Line gain control	X	X	
.24 Radiofrequency (RF) gain control	X	X	
.25 Local gain control	X	X	X
.26 Bandwidth kilocycle switch	X	X	
.27 Audio response switch	X	X	X
.28 Automatic gain control (AGC) switch	X	X	X
.29 Limiter switch and control	X	X	X
.210 Dial lock control	X	X	
.211 Zero adjust control	X	X	
.212 Megacycle change control	X	X	
.213 Kilocycle change control	X	X	
.214 BFO pitch control	X	X	
.215 Line meter switch	X	X	X
.216 Break-in switch	X	X	X
.217 Line level meter	X	X	
.218 Carrier level meter	X	X	
.219 Frequency indicator	X	X	
.220 Phone jack	X	X	
.221 Antenna trim control	X	X	

5222.3 PRINCIPLES OF OPERATION - None to be discussed.5222.4 PARAMETERS - None to be discussed.5222.5 SYSTEM INTERFACE - None to be discussed.5222.6 SAFETY PRECAUTIONS - None to be discussed.

What is the function of this system?

Refer to a standard print of this system or to the actual equipment.

SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

	<u>A</u>	<u>B</u>	<u>C</u>
Lower-sideband (LSB) line level control	X	X	
LSB line level switch	X	X	
Radiofrequency (RF) gain control	X	X	
LSB phone level control	X	X	
Mode selector switch	X	X	X
Beat-frequency oscillator (BFO) frequency control	X	X	
Upper-sideband (USB) phone level control	X	X	
USB line level control	X	X	
USB line level switch	X	X	
Cycles switch	X	X	X
Priority control	X	X	
10-MHz control	X	X	
5-MHz control	X	X	
100-kHz control	X	X	
10-kHz control	X	X	
1-kHz control	X	X	
LSB line meter	X	X	
USB line meter	X	X	
Priority indicator	X	X	
Buttons (2)	X	X	
LSB phone jack	X	X	
USB phone jack	X	X	

PRINCIPLES OF OPERATION - None to be discussed.

PARAMETERS - None to be discussed.

SYSTEM INTERFACE - None to be discussed.

SAFETY PRECAUTIONS - None to be discussed.

a. NAVSEA 0967-LP-118-2010

5224.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5224.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
.21 Power switch	X	X	X
.22 Input meter adjust	X	X	
.23 Noise limiter (NL) switch	X	X	X
.24 Silencer switch	X	X	X
.25 Silencer threshold control	X	X	
.26 Audiofrequency (AF) control	X	X	
.27 Phones gain control	X	X	X
.28 Align/received switch	X	X	X
.29 Oscillator switch	X	X	
.210 Tuning control and tuning lock	X	X	
.211 Dimmer control	X	X	
.212 Input meter	X	X	
.213 Output meter	X	X	
.214 Crystal indicator lamp	X	X	
.215 Fuses (2)	X	X	
.216 Headphones jack	X	X	
.217 Crystal holder	X	X	
.218 Megacycle dial	X	X	

5224.3 PRINCIPLES OF OPERATION - None to be discussed.5224.4 PARAMETERS - None to be discussed.5224.5 SYSTEM INTERFACE - None to be discussed.5224.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-428-1010

What is the function of this system?

Refer to a standard print of this system or to the actual equipment.

SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
1 Power switch	X	X	X
2 Squelch adjust (ADJ) knob	X	X	
3 Main adjust (ADJ) knob	X	X	
4 Phone adjust (ADJ) knob	X	X	
5 Output outlet	X	X	
6 Receiver input	X	X	
7 Level adjust (ADJ) knob	X	X	
8 Buffer	X	X	
9 Radiofrequency adjust (RF ADJ) knob	X	X	
10 Antenna adjust (ANT ADJ) knob	X	X	
11 Fuses (2)	X	X	

PRINCIPLES OF OPERATION - None to be discussed.

PARAMETERS - None to be discussed.

SYSTEM INTERFACE - None to be discussed.

SAFETY PRECAUTIONS - None to be discussed.

5226.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual

5226.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components
component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

		A	B
.21	Radio set control (C-3866/SRC)	X	X
	a. Channel dial	X	X
	b. Local-remote switch	X	X
	c. Emergency power switch	X	X
	d. Emergency power indicator	X	X
	e. Radio set power pushbuttons (2)	X	X
	f. Radio set power indicator	X	X
	g. 28V DC fuse	X	X
	h. 12V DC fuse	X	X
	i. Main power fuse	X	X
	j. Control fuse	X	X
	k. Start-stop fuse	X	X
	l. Radio set fuse	X	X
.22	Radiofrequency amplifier (AM-1565/URC)	X	X
	a. Power switch	X	X
	b. Power indicator	X	X
	c. Meter	X	X
	d. Meter switch	X	X
	e. Dimmer control	X	X
	f. Caution indicator	X	X
	g. Test key switch	X	X
	h. High-voltage indicator	X	X
	i. Excitation controls (2)	X	X
	j. Local-remote switch	X	X
	k. Output loading screws	X	X
	l. Channel tuning potentiometers	X	X
	m. Channel selector switch	X	X
	n. Manual tuning control	X	X
	o. Frequency meter	X	X
	p. Log/log dial	X	X
	q. Radiofrequency output switch	X	X
.23	Radio set (AN/URC-9)	X	X
	a. Power switch	X	X
	b. Power indicator	X	X
	c. Dimmer control	X	X
	d. Channel selector switch	X	X

SYSTEM COMPONENTS AND COMPONENT PARTS (CONT'D)

	A	B	C
e. Manual frequency switches (3)	X	X	X
f. Channel indicator	X	X	
g. Frequency indicator	X	X	
h. Squelch control	X	X	X
i. Squelch disable push switch	X	X	
j. Call light	X	X	
k. Volume control	X	X	
l. Mode switch	X	X	X
m. Meter	X	X	
n. Meter switch	X	X	X
o. 19-channel memory drum	X	X	X
4 Indicator control (C-3868/SRC)	X	X	
a. On/off switch	X	X	X
b. Channel selector dial	X	X	
c. Channel indicator	X	X	

PRINCIPLES OF OPERATION - None to be discussed.

PARAMETERS - None to be discussed.

SYSTEM INTERFACE - None to be discussed.

SAFETY PRECAUTIONS - None to be discussed.

5227.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5227.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
.21 10-MHz control	X	X	
.22 1-MHz control	X	X	
.23 100-kHz control	X	X	
.24 10-kHz control	X	X	
.25 1-kHz control	X	X	
.26 Cycles switch	X	X	X
.27 Mode selector switch	X	X	X
.28 Lower-sideband (LSB) level meter switch	X	X	X
.29 Upper-sideband (USB) level meter switch	X	X	X
.210 LSB meter	X	X	
.211 USB meter	X	X	
.212 Local/remote switch	X	X	X
.213 Continuous-wave (CW) key jack	X	X	
.214 Primary power fuses	X	X	

5227.3 PRINCIPLES OF OPERATION - None to be discussed.

5227.4 PARAMETERS - None to be discussed.

5227.5 SYSTEM INTERFACE - None to be discussed.

5227.6 SAFETY PRECAUTIONS - None to be discussed.

What is the function of this system?

Refer to a standard print of this system or to the actual equipment.

SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

	A	B	C
Primary power fuses (3)	X	X	
Blower fuse	X	X	
Exciter coupler fuse	X	X	
Fuse (28V DC)	X	X	
Fuse (500V DC)	X	X	
Primary power switch	X	X	X
Power amplifier bias control	X	X	
Power control	X	X	
Key switch	X	X	X
Overload switch	X	X	X
Overload indicator	X	X	
Frequency selector switch	X	X	X
Frequency indicator window	X	X	
Standby indicator	X	X	
Operate indicator	X	X	
Power meter	X	X	
Power meter switch	X	X	X
Multipurpose meter	X	X	
Multipurpose meter switch	X	X	X
Overload alarm switch	X	X	X
Overload alarm	X	X	

PRINCIPLES OF OPERATION - None to be discussed.

PARAMETERS - None to be discussed.

SYSTEM INTERFACE - None to be discussed.

SAFETY PRECAUTIONS - None to be discussed.

5229 RADIOFREQUENCY AMPLIFIER (AM-3007) SYSTEM

References:

- a. NAVSEA 0967-LP-878-5010

5229.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual e

5229.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components a
component parts:

- A. What is its function?
B. Where is it located?
C. What are the positions and functions of each position?

	A	B	C
.21 Radiofrequency (RF) output meter	X	X	
.22 RF output selector switch	X	X	X
.23 RF power meter switch	X	X	X
.24 RF output tune/operate meter switch	X	X	X
.25 Antenna coupler bypass switch	X	X	X
.26 Antenna coupler tune switch	X	X	X
.27 Amplifier meter switch	X	X	X
.28 Primary power selector switch	X	X	X
.29 Primary power indicator	X	X	
.210 Amplifier meter	X	X	
.211 Primary power fuses (2)	X	X	
.212 Primary power on/off switch	X	X	X
.213 Antenna coupler tune control	X	X	X
.214 Antenna coupler load control	X	X	X

5229.3 PRINCIPLES OF OPERATION - None to be discussed.

5229.4 PARAMETERS - None to be discussed.

5229.5 SYSTEM INTERFACE - None to be discussed.

5229.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-073-3010

1 What is the function of this system?

11 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
.21 Overload reset switch	X	X	
.22 Plate power on/off switch	X	X	X
.23 Filament power on/off switch	X	X	X
.24 Power selector switch	X	X	X
.25 Emission selector switch	X	X	X
.26 Local remote switch	X	X	X
.27 Low-voltage rectifier overload (LV RECT OVLD) reset switch	X	X	X
.28 6-wire remote/2-wire remote switch	X	X	X
.29 Test tones switch	X	X	X
.210 Upper-sideband modulation (USB MOD) level switch	X	X	X
.211 Lower-sideband modulation (LSB MOD) level switch	X	X	X
.212 Handset USB/LSB panel jacks	X	X	
.213 Modulation (MOD) level direct USB/LSB adjust knob	X	X	
.214 MOD level amplifier (amp) USB/LSB adjust knob	X	X	
.215 Input level amp USB/LSB adjust knob	X	X	
.216 Sidetone level USB/LSB adjust knob	X	X	
.217 Carrier reinsert switch	X	X	X
.218 Emission selector switch	X	X	X
.219 Sideband selector	X	X	
.220 Auxiliary range (C2) switch	X	X	X
.221 Range (C1) switch	X	X	X
.222 Frequency (D) switch	X	X	X
.223 Frequency shift-keying (FSK) test switch	X	X	X
.224 Meter indication switch	X	X	X
.225 Interpolation oscillator (INT OSC) tuning switch	X	X	
.226 Tuning A switch	X	X	X
.227 Tuning B switch	X	X	X
.228 Intermediate-power amplifier (IPA) tuning F control	X	X	
.229 IPA fine tuning control	X	X	
.230 Power amplifier (PA) tuning G control	X	X	
.231 Tune coupling control	X	X	
.232 PA coupling H control	X	X	
.233 Test voltmeter switch	X	X	X
.234 PA cathode current meter switch	X	X	X
.235 Antenna tuner position K control up switch	X	X	

.237	Coupler antenna J switch	X X X
.238	Tuner control switch	X X X
.239	Output meter switch	X X X
.240	Radiofrequency (RF) set for MOD control	X X X
.241	Standing-wave ratio (SWR) calibrate control	X X X
.242	High-voltage overload push-to-reset switch	X X
.243	Drive adjust knob	X X
.244	Emergency stop switch	X X
.245	Antenna tuner position control slow read SWR M switch	X X

5230.3 PRINCIPLES OF OPERATION - None to be discussed.

5230.4 PARAMETERS - None to be discussed.

5230.5 SYSTEM INTERFACE - None to be discussed.

5230.6 SAFETY PRECAUTIONS - None to be discussed.

What is the function of this system?

- 1 Refer to a standard print of this system or to the actual equipment.

SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the modes of operation or control?
- D. What are the positions and functions of each position?

	A	B	C	D
1 AN/WSC-3 LOS radio set	X	X	X	
a. Test select switch	X	X		X
b. Test switch	X	X		X
c. Malfunction indicator	X	X		X
d. Carrier-on indicator	X	X		
e. Test key switch	X	X		
f. Handset	X	X		
g. Radiofrequency (RF) power meter	X	X		
h. RF power switch	X	X		X
i. Volume control	X	X		
j. Squelch switch	X	X		
k. Power level control	X	X		
l. Manual frequency select switch	X	X		X
m. Operate time meter	X	X		
n. Frequency select switch	X	X		X
o. Communications mode switch	X	X		X
p. Standby indicator	X	X		
q. Primary power indicator	X	X		
r. Standby/operate switch	X	X		
s. Power switch	X	X		
t. Preset switch	X	X		X
u. Preset memory/preset channel switch	X	X		X
v. Control switch	X	X		X
w. 15-amp fuse indicator	X	X		
2 Remote control (C-9531/WSC-3)	X	X	X	
a. Carrier-on indicator	X	X		
b. Manual frequency select indicator	X	X		X
c. Equipment-on indicator	X	X		
d. Preset channel switch	X	X		X
e. Headset	X	X		
f. Volume control	X	X		

PRINCIPLES OF OPERATION - None to be discussed.

PARAMETERS - None to be discussed.

References:

a. NAVSEA 0967-LP-207-9010

1 What is the function of this system?

11 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the modes of operation or control?

D. What are the positions and functions of each position?

	A	B	C	D
21 Status indicators	X	X		
22 Transmit frequency selector	X	X		
23 Receive frequency selector	X	X		
24 Test lamps switch	X	X		X
25 Frequency control knobs	X	X		
26 Standby-operate switch	X	X		X
27 Alarm indicators	X	X		
28 Transmitter gain knob	X	X		
29 Power amplifier (PA) select button	X	X		X
210 10-15 range select button	X	X		X
211 Receiver gain knob	X	X		
212 Radiofrequency (RF) power meter	X	X		X
213 Audio level meter	X	X		X
214 Antenna coupler alarm indicators	X	X		
215 Mode selector pushbutton (white)	X	X	X	X
216 Subscriber pushbutton (green)	X	X		X
217 Local voice pushbutton (yellow)	X	X		X
218 Subscriber-off pushbutton (black)	X	X		X
219 Handset push-to-talk button	X	X		
220 Handset level control	X	X		
221 Speaker level control	X	X		
222 Speaker on/off switch	X	X		
223 Primary power circuit breaker	X	X		X

3 PRINCIPLES OF OPERATION - None to be discussed.

4 PARAMETERS

For the items listed answer the following questions:

A. What are the normal operating values and tolerances?

41 Transmit power

42 Standing-wave ratio

43 Receive level

44 Frequency

References:

a. NAVSEA 0967-LP-066-7020

What is the function of this system?

1 Refer to a standard print of this system or to the actual equipment.

SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

	A	B	C
1 Off/on switch	X	X	X
2 Power-on indicator	X	X	
3 Handset switch	X	X	X
4 Handset jack	X	X	
5 Frequency selector	X	X	X
6 Frequency comparator meter	X	X	
7 Meter zero control	X	X	
8 Gain control	X	X	
9 Phone jack	X	X	
10 Sideband selector switch	X	X	X
11 Mic gain control	X	X	
12 Beat-frequency oscillator (BFO) switch	X	X	X
13 Transmit (XMIT) lamp	X	X	
14 Own ship's course (OSC) ON lamp	X	X	
15 Output control	X	X	
16 OSC control switch	X	X	X
17 Monitor switch	X	X	X
18 Transmit-receive-continuous wave (XMIT-REC-CW) test switch	X	X	X
19 Volume units (VU) meter	X	X	
20 Meter multiplier switch	X	X	X
21 Exciter radiofrequency (RF) gain control	X	X	
22 Meter switch	X	X	X
23 Multipurpose meter	X	X	
24 Tune-local-external control switch	X	X	X
25 Receiver RF gain control	X	X	
26 Single-sideband-amplitude modulation (SSB-AM) switch	X	X	X
27 Band indicating lamp	X	X	
28 Automatic-frequency control (AFC) meter	X	X	
29 0.1 C tune control	X	X	X
30 Frequency change control	X	X	X

5233.2 SYSTEM COMPONENTS AND COMPONENT PARTS (CONT'D)

- .231 Band change switch
- .232 Operate tune switch
- .233 Power amplifier (PA) tune control
- .234 Driver tune control
- .235 Band switch
- .236 Plate lamp
- .237 Plate switch

A	B	C
X	X	X
X	X	X
X	X	
X	X	
X	X	X
X	X	
X	X	X

5233.3 PRINCIPLES OF OPERATION - None to be discussed.

5233.4 PARAMETERS - None to be discussed.

5233.5 SYSTEM INTERFACE - None to be discussed.

5233.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-163-9020

1.1 What is the function of this system?

1.11 Refer to a standard print of this system or to the actual equipment.

1.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the modes of operation or control?

D. What are the safety/protective devices for this component/component part?

E. What are the positions and functions of each position?

	A	B	C	D	E
1.21 Remote control unit	X	X	X		
a. Local-remote switch	X	X			
b. Primary power switch	X	X		X	
c. Transmit frequency selector	X	X			
d. Transmit mode select switch	X	X	X		X
e. Transmit gain knob	X	X			
f. Receive frequency selector	X	X			
g. Receive mode select switch	X	X	X		X
h. Standby-operate buttons	X	X			
i. Audio level meter	X	X			
j. Radiofrequency (RF) meter	X	X			
k. Test meter switch	X	X	X		
l. Alarm indicators	X	X			

1.3 PRINCIPLES OF OPERATION - None to be discussed.

1.4 PARAMETERS

For the items listed answer the following questions:

A. What are the normal operating values and tolerances?

B. Where are the parameters sensed or monitored?

1.41 Transmit power

1.42 Standing-wave ratio

1.43 Receive level

1.5 SYSTEM INTERFACE - None to be discussed.

1.6 SAFETY PRECAUTIONS - None to be discussed.

5235 MARITIME RADIO TRANSCEIVER (AN/URC-80) SYSTEM

References:

- a. Maritime Radio Transceiver AN/URC-80 (Collins)
(523-0561687-001837)

5235.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual equipment.

5235.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the modes of operation or control?
- D. What are the positions and functions of each position?

		A	B	C	D
.21	Control panel (916M-1)	X	X	X	
	a. Channel selector thumbwheel	X	X		X
	b. Selector switch	X	X		X
	c. Power switch	X	X	X	X
	d. Dimmer switch	X	X		
	e. Main receiver switch	X	X		X
	f. Mode switch	X	X		X
	g. Transmit light	X	X		X
	h. Call light	X	X		X
	i. Auxiliary receiver switch	X	X		X
.22	Power control unit	X	X		

5235.3 PRINCIPLES OF OPERATION - None to be discussed.

5235.4 PARAMETERS - None to be discussed.

5235.5 SYSTEM INTERFACE - None to be discussed.

5235.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-467-3010

1. What is the function of this system?

11. Refer to a standard print of this system or to the actual equipment.

2. SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
.21 Call indicator	X	X	
.22 Band switch	X	X	X
.23 Light switch	X	X	X
.24 Speaker switch	X	X	X
.25 Antenna connector	X	X	
.26 Lamp	X	X	
.27 Channel dial	X	X	
.28 Megacycle (Mc) tune knob	X	X	
.29 Kilocycle (kc) tune knob	X	X	
.210 Power switch	X	X	X
.211 X-mode connector	X	X	
.212 Squelch switch	X	X	X
.213 Volume control knob	X	X	
.214 Retransmit R/W mike connector	X	X	
.215 Speaker mike connector	X	X	
.216 Antenna control connector	X	X	

3. PRINCIPLES OF OPERATION - None to be discussed.

4. PARAMETERS - None to be discussed.

5. SYSTEM INTERFACE - None to be discussed.

6. SAFETY PRECAUTIONS - None to be discussed.

5237.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5237.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

	A	B	C
.21 Line fuses (2)	X	X	
.22 Modulator plate fuse	X	X	
.23 Power-on/emergency-off switch	X	X	X
.24 Start-stop switch	X	X	X
.25 Power-on indicator light with dimmer control	X	X	
.26 Crystal selector switch A	X	X	X
.27 Modulated continuous-wave (MCW) phone switch	X	X	X
.28 Local remote switch	X	X	X
.29 Carrier-on indicator light with dimmer control	X	X	
.210 Carrier test switch	X	X	X
.211 Radiofrequency (RF) driver tuning control B	X	X	
.212 Power amplifier (PA) tuning control C	X	X	
.213 Speech amplifier gain control	X	X	
.214 Speech modulation level control	X	X	
.215 Earphone level	X	X	
.216 Microphone jack	X	X	
.217 Earphone jack	X	X	
.218 Handset jack	X	X	
.219 Meter control	X	X	
.220 Meter	X	X	

5237.3 PRINCIPLES OF OPERATION - None to be discussed.

5237.4 PARAMETERS - None to be discussed.

5237.5 SYSTEM INTERFACE - None to be discussed.

5237.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-428-1020

238.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

238.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
.21 On/off switch	X	X	
.22 Fuses (2)	X	X	
.23 Remote/local switch	X	X	
.24 Push-to-talk/carrier test switch	X	X	X
.25 Test switches (Nos. 1 and 2)	X	X	X
.26 Tune/operate switch	X	X	
.27 Level adjust (ADJ) knob	X	X	
.28 Buffer adjust (ADJ) knob	X	X	
.29 Doubler adjust (ADJ) knob	X	X	

238.3 PRINCIPLES OF OPERATION - None to be discussed.

238.4 PARAMETERS - None to be discussed.

238.5 SYSTEM INTERFACE - None to be discussed.

238.6 SAFETY PRECAUTIONS - None to be discussed.

5239 ANTENNAS (AN/SRA-17 AND AN/SRA-43) SYSTEM

References:

- a. NAVSEA 0967-LP-203-8010
- b. NAVSEA 0967-LP-269-4010

5239.1 What is the function of this system?

.11 Draw a diagram of this system showing all components listed

5239.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What is the source of power?
- D. What is the source of control signals?

.21 Radiofrequency (RF) tuner

.22 Antenna control unit

- a. Noise generator
- b. Range selector switch
- c. Tuning potentiometer

A	B	C
X	X	
X	X	X
X	X	
X	X	
X	X	

5239.3 PRINCIPLES OF OPERATION

.31 How do the components work together to achieve the system's

.32 Using a diagram of the system, show the path of:

- a. RF signal from the antenna to the RF tuner.
- b. RF signal from the RF tuner to the receiver.
- c. Control signal from the antenna control unit to the RF t

.33 What indications will you receive if the system is malfunctioning?

5239.4 PARAMETERS

.41 What are the normal operating values and tolerances of RF tuner frequency?

5239.5 SYSTEM INTERFACE - None to be discussed.

5239.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-065-3010

0.1 What is the function of this system?

0.11 Refer to a standard print of this system or to the actual equipment.

0.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

0.21 Filter panel (SB-404/SRA-12)

a. Output receptacles (21)

b. Red-circle output receptacles (7)

c. Antenna input receptacle

0.22 Filter subassemblies

0.23 Patch cord

A B C

X X

X X

X X

X X

X X X

X X

0.3 PRINCIPLES OF OPERATION

0.31 How and where is the radiofrequency (RF) signal:

a. Originated?

b. Used?

c. Filtered?

0.4 PARAMETERS - None to be discussed.

0.5 SYSTEM INTERFACE - None to be discussed.

0.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-303-8610

5241.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual eq

5241.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What is its frequency range?

.21 Signal distribution panel

.22 Antenna couplers

.23 Power supply

.24 Dummy load

A B C

X X

X X X

X X

X X

5241.3 PRINCIPLES OF OPERATION - None to be discussed.5241.4 PARAMETERS - None to be discussed.5241.5 SYSTEM INTERFACE - None to be discussed.5241.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-037-8000

What is the function of this system?

1 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
1 Manual-local, preset-remote preset switch	X	X	X
2 Local channel selector switch	X	X	X
3 Manual frequency selector switches (3)	X	X	X
4 On/off switch	X	X	X
5 Dimmer control	X	X	
6 Power-on indicator	X	X	
7 Power meters (4)	X	X	
8 Forward power-reflected power switches (4)	X	X	X

3 PRINCIPLES OF OPERATION - None to be discussed.

4 PARAMETERS - None to be discussed.

5 SYSTEM INTERFACE - None to be discussed.

6 SAFETY PRECAUTIONS - None to be discussed.

References:

- a. NAVSEA 0967-LP-284-6010

5243.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual

5243.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components component parts:

- A. What is its function?
- B. Where is it located?

.21 Power supply assembly (PP4993/SRA)

- a. Power switch
- b. Fuses (6)
- c. Power lamp
- d. Alarm silencer switch
- e. Alarm sonic generator

.22 Antenna coupler

- a. Output coupling control
- b. Output coupling dial
- c. Tune/operate switch
- d. Emergency on/off switch
- e. Emergency lamp
- f. Air flow lamp
- g. Normal lamp
- h. Retune lamp
- i. Radiofrequency (RF) power forward meter
- j. RF power reflected meter
- k. Frequency adjust input dial
- l. Frequency adjust input control
- m. Frequency adjust output dial
- n. Frequency adjust output control

5243.3 PRINCIPLES OF OPERATION

- .31 Using a diagram of the system, show the path of RF signal transmitter to the antenna coupler.

5243.4 PARAMETERS - None to be discussed.

5243.5 SYSTEM INTERFACE - None to be discussed.

5243.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-297-6010

1 What is the function of this system?

11 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
21 Main power fuses (2)	X	X	
22 Main power switch	X	X	
23 Main power indicator	X	X	
24 Mode selector switch	X	X	X
25 Left pushbutton	X	X	X
26 Right pushbutton	X	X	X
27 Retune pushbutton	X	X	X
28 Tuning indicator lamp	X	X	
29 Ready indicator lamp	X	X	
210 Overload alarm	X	X	
211 Overload switch	X	X	
212 Overload indicator lamp	X	X	
213 Overload alarm	X	X	
214 L-C switch	X	X	X
215 Element position meter	X	X	
216 Discriminator null meter	X	X	

3 PRINCIPLES OF OPERATION - None to be discussed.

4 PARAMETERS - None to be discussed.

5 SYSTEM INTERFACE - None to be discussed.

6 SAFETY PRECAUTIONS - None to be discussed.

5245 ULTRAHIGH-FREQUENCY (UHF) SURFACE-TO-AIR ANTENNA
(AN/SRA-62) SYSTEM

References:

- a. Manufacturer's Technical Manual

5245.1 What is the function of this system?

5245.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the probable indications if this component fails?

- .21 Power divider
- .22 Transmission coaxial cable
- .23 Polarization network
- .24 Antenna network

5245.3 PRINCIPLES OF OPERATION

- .31 How do the components work together to achieve to system's fu
- .32 Using a diagram of the system, show the path of radiofrequen
signal:
 - a. From the coupler to the power divider.
 - b. From the power divider to the polarization network.
 - c. From the polarization network to the antenna network.

5245.4 PARAMETERS

For the items listed answer the following questions:

- A. What are the normal operating values and tolerances?
- B. Where are the parameters sensed or monitored?

- .41 Voltage standing-wave ratio

5245.5 SYSTEM INTERFACE - None to be discussed.

5245.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-386-3010

- .1 What is the function of this system?
- .11 Refer to a standard print of this system or to the actual equipment.

.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

	A	B	C
.21 Power switch	X	X	X
.22 Power lamp	X	X	
.23 Frequency option switch	X	X	X
.24 Keying switch	X	X	X
.25 Mode switch	X	X	X
.26 Meter	X	X	
.27 Meter switch	X	X	X
.28 Send loop current adjust rheostat	X	X	
.29 Receive loop current adjust rheostat	X	X	
.210 Send lamp	X	X	
.211 Receive lamp	X	X	
.212 Send monitor jack	X	X	
.213 Fuses	X	X	
.214 Failure lamps	X	X	

.3 PRINCIPLES OF OPERATION - None to be discussed.

.4 PARAMETERS

For the items listed answer the following questions:

- A. What are the normal operating values and tolerances?

- .41 Receive loop current
- .42 Send loop current
- .43 Send bias
- .44 Receive bias
- .45 Send level
- .46 Receive level
- .47 Mark/space frequency option A
- .48 Mark/space frequency option B

.5 SYSTEM INTERFACE - None to be discussed.

.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-116-2010

5247.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5247.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
.21 Power switch	X	X	X
.22 Loop current adjust knob	X	X	
.23 Send bias adjust knob	X	X	
.24 Receive level control	X	X	
.25 Receive bias control	X	X	
.26 Meter switch	X	X	X
.27 Control switch	X	X	X
.28 Receive lamp	X	X	
.29 Transmit lamp	X	X	
.210 Power lamp	X	X	
.211 Meter	X	X	
.212 Teletypewriter (TTY) monitor	X	X	
.213 Utility outlet	X	X	

5247.3 PRINCIPLES OF OPERATION - None to be discussed.5247.4 PARAMETERS

For the items listed answer the following questions:

A. What are the normal operating values and tolerances?

- .41 Receive loop current
- .42 Send loop current
- .43 Send bias
- .44 Receive bias
- .45 Send level
- .46 Receive level

5247.5 SYSTEM INTERFACE - None to be discussed.5247.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-034-9010

1 What is the function of this system?

11 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

21 Level controls (2)

22 Shift switches (2)

23 Function switches (2)

24 Polarity switches (2)

25 Speed switches (2)

26 Power on/off switches (2)

27 Fuses (4)

28 Power-on lamps (2)

29 Tuning indicator

A B C

X X X

X X X

X X X

X X X

X X X

X X

X X X

X X

X X

3 PRINCIPLES OF OPERATION - None to be discussed.

4 PARAMETERS - None to be discussed.

5 SYSTEM INTERFACE - None to be discussed.

6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-239-4010

5249.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5249.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
 B. Where is it located?
 C. What are the safety/protective devices for this component/component part?
 D. What are the positions and functions of each position?

		A	B	C	D
.21	Frequency shift converter (CV-1920A)	X	X	X	
	a. Tone input switch	X	X		X
	b. Diversity combination switch	X	X		X
	c. Delay adjust rheostat	X	X		
	d. Signal sense switch	X	X		X
	e. Discriminator balance (DISC BAL) adjust rheostat	X	X		
	f. Diversity balance (DIV BAL) adjust rheostat	X	X		
	g. Bias adjust rheostat	X	X		
	h. Primary power fuse	X	X		
	i. Test points	X	X		
.22	Frequency shift keyer (KY-588A)	X	X	X	
	a. Direct-current (DC) loop diversity switch	X	X		X
	b. High-level/low-level strap	X	X		
	c. Trigger level adjust rheostat	X	X		
	d. Signal sense switch	X	X		X
	e. Bias adjust rheostat	X	X		
	f. Tone control	X	X		
	g. Tone switch	X	X		X
	h. Primary power fuse	X	X		
	i. Test points	X	X		
.23	Control attenuator (C-6554A)	X	X	X	
	a. Primary power on/off switch	X	X		
	b. Primary power fuses (2)	X	X		
	c. Primary power indicator light	X	X		
	d. Mode switch	X	X		X
	e. Group attenuator level adjust rheostat	X	X		
	f. Test points	X	X		

5249.3 PRINCIPLES OF OPERATION - None to be discussed.5249.4 PARAMETERS - None to be discussed.5249.5 SYSTEM INTERFACE - None to be discussed.5249.6 SAFETY PRECAUTIONS - None to be discussed.

References:

- a. Instruction Book F57068/0613LP0004609
- b. NAVSEA 0967-LP-467-3010

What is the function of this system?

Refer to a standard print of this system or to the actual equipment.

SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?

Terminal box

Telegraph-telephone terminal

- a. Handset jack
- b. Very-low-frequency (VLF) jack
- c. High-frequency (HF) jack
- d. Mode selector switch
- e. Monitor switch
- f. Handset switch
- g. Channel selector switches
- h. Sync switch
- i. Fuse

Control terminal set

- a. Mode selector switch
- b. Handset jack

Telegraph-telephone modem (multiplexer/demultiplexer)

Radio transceivers (2-VRC-46)

Antenna

PRINCIPLES OF OPERATION - None to be discussed.

PARAMETERS - None to be discussed.

SYSTEM INTERFACE - None to be discussed.

SAFETY PRECAUTIONS - None to be discussed.

5251.1 what is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5251.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

.21 Transfer switches

.22 Receiver designation plate

.23 Remote control station designation plate

A B C

X X X

X X

X X

5251.3 PRINCIPLES OF OPERATION - None to be discussed.

5251.4 PARAMETERS - None to be discussed.

5251.5 SYSTEM INTERFACE - None to be discussed.

5251.6 SAFETY PRECAUTIONS - None to be discussed.

References:

- a. Manufacturer's Technical Manual
- b. NAVTELCOMINST C2796.1

252.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual equipment.

252.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?

- .21 Loop jacks
- .22 Set jacks
- .23 Miscellaneous jacks
- .24 Local line current meter
- .25 Line current adjust rheostats
- .26 Fuses
- .27 DC power supply unit

252.3 PRINCIPLES OF OPERATION - None to be discussed.

252.4 PARAMETERS

- .41 What are the normal operating values and tolerances of the local line current?

252.5 SYSTEM INTERFACE - None to be discussed.

252.6 SAFETY PRECAUTIONS

- .61 What special safety precautions apply to patching from a looping jack to a set jack?

5253.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equip

5253.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

.21 Transfer switches

.22 Transmitter designator plate

.23 Remote control station designation plate

A	B	C
X	X	X
X	X	
X	X	

5253.3 PRINCIPLES OF OPERATION - None to be discussed.

5253.4 PARAMETERS - None to be discussed.

5253.5 SYSTEM INTERFACE - None to be discussed.

5253.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-069-5010

- 4.1 What is the function of this system?
- .11 Refer to a standard print of this system or to the actual equipment.

4.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What are the positions and functions of each position?

	A	B	C
.21 Transmitter power start/stop switch	X	X	
.22 Power-on indicator lamp	X	X	
.23 Carrier-on indicator lamp	X	X	
.24 Selector switch	X	X	X

4.3 PRINCIPLES OF OPERATION - None to be discussed.

4.4 PARAMETERS - None to be discussed.

4.5 SYSTEM INTERFACE - None to be discussed.

4.6 SAFETY PRECAUTIONS - None to be discussed.

References:

- a. Manufacturer's Technical Manual

5255.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual equipment

5255.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What protection is provided by this component/component part

.21 Power line switch

.22 Power light

.23 Fuses

A	B	C
X	X	
X	X	
X	X	X

5255.3 PRINCIPLES OF OPERATION - None to be discussed.

5255.4 PARAMETERS - None to be discussed.

5255.5 SYSTEM INTERFACE - None to be discussed.

5255.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVTELCOMINST C2796.1

1 What is the function of this system?

11 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What is the source of control signals?
- D. What are the positions and functions of each position?
- E. What are the physical locations of the sensing points?

	A	B	C	D	E
21 High-frequency (HF) receiver (R1051/URR)	X	X	X	X	
22 Very-high-frequency/ultrahigh-frequency (VHF/UHF) receiver		X	X	X	X
23 Oscilloscope	X	X	X	X	X
24 Frequency counter	X	X	X	X	X
25 Distortion analyzer	X	X	X	X	X
26 Spectrum analyzer	X	X	X	X	X
27 Two-tone signal generator	X	X	X	X	
28 dB meter	X	X	X		
29 Amplifier (AM3729/U)	X	X	X		
210 Speaker (LS474/U)	X	X	X		
211 Audio patch panel	X	X	X		
212 Transmitter remote unit/unit with handset	X	X	X		
213 Signal attenuator	X	X	X		
214 Direct-current (DC) voltmeter	X	X	X		
215 1:1 600-ohm isolation transformer	X	X	X		
216 1-kHz audio filters (2)	X	X	X		

3 PRINCIPLES OF OPERATION

For the items listed answer the following questions:

- A. How and where are the signals originated?
- B. How and where are the signals used?
- C. How and where are the signals indicated?
- D. How and where are the signals converted?

31 Input audio signals

32 Input DC signals

33 Input HF signals

34 Input UHF signals

35 Input VHF signals

36 Input low-frequency (LF) signals

37 Input very-low-frequency (VLF) signals

- 5256.4 PARAMETERS - None to be discussed.
- 5256.5 SYSTEM INTERFACE - None to be discussed.
- 5256.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-985-8010

What is the function of this system?

Refer to a standard print of this system or to the actual equipment.

SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What is the source of control signals?

	<u>A</u>	<u>B</u>	<u>C</u>
Power-on light	X	X	
Carrier-on light	X	X	
Transmitter start/stop button	X	X	X
Earphone level	X	X	X
Key jack	X	X	
Phone jack	X	X	
Microphone jack	X	X	
Handset or chest set adapter	X	X	

PRINCIPLES OF OPERATION - None to be discussed.

PARAMETERS - None to be discussed.

SYSTEM INTERFACE - None to be discussed.

SAFETY PRECAUTIONS - None to be discussed.

- a. NAVSEA 0967-LP-170-3010
- b. NAVSEA 0967-LP-077-8010

5258.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual equipment.

5258.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?

- .21 Frequency monitoring unit
- .22 Frequency correction unit
- .23 Frequency distribution unit

5258.3 PRINCIPLES OF OPERATION - None to be discussed.

5258.4 PARAMETERS - None to be discussed.

5258.5 SYSTEM INTERFACE

- .51 How does loss of alternating-current (AC) power affect this system?

5258.6 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-282-5010

1 What is the function of this system?

11 Refer to a standard print of this system or to the actual equipment.

2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What is the source of power?

D. What protection is provided by this component/component part?

		A	B	C	D
21	Remote-switching control panels (12)	X	X		
	a. Switch lock	X	X		X
	b. Switch lock indicators (2)	X	X		
	c. Monitor pushbutton indicators (9)	X	X		
	d. Selector pushbutton switches (45)	X	X		
	e. Transfer release pushbutton switches (9)	X	X		
	f. Power switch	X	X		
22	Power supplies (12)	X	X	X	

3 PRINCIPLES OF OPERATION - None to be discussed.

4 PARAMETERS - None to be discussed.

5 SYSTEM INTERFACE - None to be discussed.

6 SAFETY PRECAUTIONS - None to be discussed.

References:

- a. Operation and Maintenance Manual (EE107-AA-OMI-010/ELLOSA211

5260.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual equipment

5260.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
 B. Where is it located?
 C. What is the source of power?
 D. What protection is provided by this component/component part?
 E. What are the probable indications if this component fails?

		A	B	C	D	E
.21	Control and status panel	X	X			
	a. Monitor plain/cipher indicators/selectors (2)	X	X			
	b. Monitor detect/push-to-talk (PTT) on/disconnect indicators (3)			X	X	
	c. Local/remote mode selector			X	X	
	d. Function clear selector			X	X	
	e. Monitor connect/disconnect selector			X	X	
	f. Program assign/deny selector			X	X	
	g. Status connect selector			X	X	
	h. Status assign selector			X	X	
	i. Status monitor/trunk short/line affected selector			X	X	
	j. Control line/channel/trunk selector/light-emitting diode (LED) display			X	X	
	k. Operation illegal/unavailable/complete lights (3)			X	X	
	l. Status overflow selector			X	X	
	m. Keyboard numerals and clear button			X	X	
	n. Enter selector			X	X	
	o. Fault overflow selector/LED display			X	X	
	p. Alarm silence/fault reset selectors (2)			X	X	
	q. Panel test selectors (3)			X	X	
	r. Overtemperature/thermal stress/override indicators/selectors (3)			X	X	
.22	Power supply panel			X	X	X
	a. Circuit breakers			X	X	X
	b. Blower fuses			X	X	X
	c. Hours meter			X	X	
	d. Initialize battery conditioning cycle switch			X	X	X
.23	Air intake panel			X	X	X
	a. Input power circuit breakers			X	X	X
	b. Alternating-current (AC) power indicators			X	X	X

		A	B	C	D	E
4	Remote channel select	X	X	X		
	a. Channel select controls	X	X			
	b. Request pushbutton	X	X			
	c. Dim control	X	X			
	d. Ready/no access indicators (2)	X	X			
5	Telephone set (TA-970/U)	X	X	X		X
	a. Off/PTT/hook switch positions of muting switch	X	X			
	b. Plain/cipher/disconnect/detect indicators (4)	X	X			

PRINCIPLES OF OPERATION

- 1 How do the components work together to achieve the system's function?
- 2 What is the sequence of component involvement to select a channel from a remote telephone set?
- 3 What indications will you receive if the system is malfunctioning?

PARAMETERS - None to be discussed.

SYSTEM INTERFACE

- 1 How does loss of electrical power affect this system?
- 2 How does this system interface with the following:
 - a. Secure Voice System
 - b. Nonsecure Voice System

SAFETY PRECAUTIONS - None to be discussed.

References:

- a. Manufacturer's Technical Manuals

5261.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual equipment.

5261.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?
- C. What is the source of power?
- D. What are the safety/protective devices for this component/component part?
- E. What are the probable indications if this component fails?
- F. What are the positions and functions of each position?

.21 Spectrum monitor (R-2093/TRQ-5)

	A	B	C	D	E	F
a. Cathode-ray tube (CRT) display selector	X	X	X	X	X	
b. Memory fault indicator	X	X				X
c. Standby battery on/off switch	X	X			X	
d. Display frequency selector	X	X			X	X
e. Threshold sensitivity selector	X	X			X	
f. Radiofrequency control	X	X			X	
g. Audio gain control	X	X			X	
h. Monitor fine tuning control	X	X			X	
i. Scan monitor selection switch	X	X			X	
j. Speaker	X	X				
k. Threshold selection switches (A, B, C, D)	X	X			X	
l. Display width switch	X	X			X	
m. Headphone jack	X	X				
n. Power on/off switch and light	X	X			X	
o. Standby battery supply	X	X			X	
p. CRT brightness control	X	X			X	
q. Fast pushbutton	X	X			X	
r. Charlie (C) switch	X	X			X	
s. Charlie 5 (C5) switch	X	X			X	
t. Lima 5 (L5) switch	X	X			X	
u. Lima 30 (L30) switch	X	X			X	
v. Memory test switch	X	X			X	
w. Receiver test switch	X	X			X	
x. Battery test switch	X	X			X	
y. Upper-sideband reception switch	X	X			X	
z. Frequency-modulation switch	X	X			X	
aa. Amplitude-modulation switch	X	X			X	
ab. Lower-sideband reception switch	X	X			X	

		A	B	C	D	E	F
22	High-frequency receiver (RCS-4B)	X	X	X	X	X	
	a. Display control buttons	X	X			X	
	b. CRT display selector	X	X			X	
	c. Test pushbutton	X	X			X	
	d. Clock display (minutes/seconds)	X	X			X	
	e. Frequency display (MHz)	X	X			X	
	f. Input attenuator control	X	X			X	
	g. Antenna select switch	X	X			X	
	h. Automatic/manual synchronization switch	X	X			X	
	i. Start/stop/reset buttons	X	X			X	
	j. Mode selector	X	X			X	
	k. Minutes programming switches	X	X			X	
	l. Frequency standard adjust jack	X	X			X	
	m. Cursor control buttons	X	X			X	
	n. Sweep limits control	X	X			X	
	o. Advance timer control	X	X			X	
	p. Ionogram display selector	X	X			X	
	q. CRT brightness control	X	X			X	
	r. Audio gain control	X	X			X	
	s. Cursor frequency controls	X	X			X	
	t. Lamp test control	X	X			X	
	u. Display time one control	X	X			X	
	v. Battery on/off control	X	X			X	

3 PRINCIPLES OF OPERATION

31 What indications will you receive if the system is malfunctioning?

4 PARAMETERS - None to be discussed.

5 SYSTEM INTERFACE - None to be discussed.

5 SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-105-8010

5262.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5262.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

C. What are the positions and functions of each position?

	A	B	C
.21 Primary power switch	X	X	X
.22 Power indicator light	X	X	
.23 Channel selector switch	X	X	X
.24 Fuses (2)	X	X	
.25 Fuse (spare)	X	X	
.26 Audiofrequency (AF) level control (amplifier)	X	X	
.27 Speaker AF level control	X	X	

5262.3 PRINCIPLES OF OPERATION - None to be discussed.5262.4 PARAMETERS - None to be discussed.5262.5 SYSTEM INTERFACE - None to be discussed.5262.6 SAFETY PRECAUTIONS - None to be discussed.

NAVSEA 0967-LP-213-9010

What is the function of this system?

Refer to a standard print of this system or to the actual equipment.

SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

What is its function?

Where is it located?

What protection is provided by this component/component part?

	A	B	C
Power on/off switch	X	X	
Power indicator light	X	X	
Modulator level Channel 1 switch	X	X	
Carrier-on indicator	X	X	
Complex/duplex switch	X	X	
Transmitter modulation (MOD) level Channel 1			
Control knob	X	X	
Channel 1 hold dial	X	X	
Channel 1 trip dial	X	X	
Use	X	X	X
MOD level meter	X	X	
MOD level Channel 2 switch	X	X	
Transmitter MOD level Channel 2 control knob	X	X	
Channel 2 hold dial	X	X	
Channel 2 trip dial	X	X	

PRINCIPLES OF OPERATION - None to be discussed.PARAMETERS - None to be discussed.SYSTEM INTERFACE - None to be discussed.SAFETY PRECAUTIONS - None to be discussed.

References:

a. NAVSEA 0967-LP-976-0010

5264.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5264.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

A. What is its function?

B. Where is it located?

- .21 On/off switch
- .22 Indicator light
- .23 Telegraph key
- .24 Key jack
- .25 Gap adjustment knob
- .26 Tension adjustment knob

5264.3 PRINCIPLES OF OPERATION - None to be discussed.

5264.4 PARAMETERS - None to be discussed.

5264.5 SYSTEM INTERFACE - None to be discussed.

5264.6 SAFETY PRECAUTIONS - None to be discussed.

References:

- a. AN 16-30CRT3-2

5.1 What is the function of this system?

.11 Refer to a standard print of this system or to the actual equipment.

5.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and components parts:

- A. What is its function?
B. Where is it located?
C. What is the source of control signals?
D. What are the modes of operation and control?
E. What protection is provided by this component/component part?
F. What are the positions and functions of each position?

	A	B	C	D	E	F
.21 Bag and desiccant canisters	X	X				X
.22 Antenna assembly (AS207/CRT3)	X	X				
.23 Generator (M-315-B)	X	X				
.24 Signal lamp (M-308-B)	X	X	X			
.25 Balloon (M-278-A)	X	X				
.26 Kite (M-357-A)	X	X				
.27 Radio transmitter (T-74/CRT-3)	X	X	X	X		
a. Selector switch (S-101)	X	X				X
b. Key (S-102)	X	X				
c. Cotter pin	X	X				
d. Door catch	X	X				
e. Desiccator cap (H-104)	X	X				X
f. Ground lead	X	X				
g. Antenna reel (BL-48)	X	X				
h. Antenna lead-in	X	X				
i. Socket for signal lamp (J-101)	X	X				
j. Wrench	X	X				
k. Crank	X	X				
l. Speed indicator light	X	X				
.28 Parachute (M-390-A)	X	X				

5.3 PRINCIPLES OF OPERATION - None to be discussed.

5.4 PARAMETERS - None to be discussed.

5.5 SYSTEM INTERFACE - None to be discussed.

5.6 SAFETY PRECAUTIONS - None to be discussed.

References:

- a. Manufacturer's Technical Manual

5266.1 What is the function of this system?

- .11 Refer to a standard print of this system or to the actual equipment

5266.2 SYSTEM COMPONENTS AND COMPONENT PARTS

Discuss the designated items for the following components and component parts:

- A. What is its function?
- B. Where is it located?

- .21 Receiver sync indicator
- .22 Mode switch (operate/loopback)
- .23 Control switch (remote/local)
- .24 Self-test (normal/initiate) switch
- .25 GO indicator
- .26 NO-GO indicator
- .27 Phone jack
- .28 Power switch
- .29 Handset

5266.3 PRINCIPLES OF OPERATION - None to be discussed.

5266.4 PARAMETERS - None to be discussed.

5266.5 SYSTEM INTERFACE

- .51 How does loss of a satellite affect this system?

5266.6 SAFETY PRECAUTIONS - None to be discussed.

FINAL QUALIFICATION AS
MESSAGE REPRODUCTION/DISTRIBUTION CLERK

RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated portions of the Personnel Qualification Standard (PQS). Only specified supervisors signify completion of applicable sections either by written or oral examination, observation of performance. The examination or checkout need not cover every detail, however, a sufficient number should be covered to demonstrate the examinee's competence. Should supervisors "give away" their signatures, unnecessary difficulties are expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to reflect the awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified MESSAGE REPRODUCTION/DISTRIBUTION CLERK (5301).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

RECORD ENTRY _____ DATE _____
(Personnel Officer)

MESSAGE REPRODUCTION/DISTRIBUTION CLERK

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
TAPE CUTTER

RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to reflect current awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified TAPE CUTTER (5302).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

RECORD ENTRY _____ DATE _____
(Personnel Officer)

TAPE CUTTER

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
FILE CLERK

RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every section; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors "give away" their signatures, unnecessary difficulties will be expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee designated a qualified FILE CLERK (5303).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

OFFICE RECORD ENTRY _____ DATE _____
(Personnel Officer)

FILE CLERK

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
COMMUNICATIONS PUBLICATIONS CORRECTIONS CLERK

RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to reflect the awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified COMMUNICATIONS PUBLICATIONS CORRECTIONS CLERK (5304).

RECOMMENDED _____ DATE _____
 (Supervisor)

RECOMMENDED _____ DATE _____
 (Division Officer)

RECOMMENDED _____ DATE _____
 (Department Head)

RECOMMENDED _____ DATE _____
 (Commanding Officer)

RECORD ENTRY _____ DATE _____
 (Personnel Officer)

COMMUNICATIONS PUBLICATIONS CORRECTIONS CLERK

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
FLEET BROADCAST OPERATOR

RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified FLEET BROADCAST OPERATOR (5305).

(Supervisor) DATE _____

(Division Officer) DATE _____

(Department Head) DATE _____

(Commanding Officer) DATE _____

(Personnel Officer) DATE _____

FLEET BROADCAST OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
FULL-PERIOD TERMINATION OPERATOR

NAME _____ RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to ensure awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified FULL-PERIOD TERMINATION OPERATOR (5306).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

SERVICE RECORD ENTRY _____ DATE _____
(Personnel Officer)

FULL-PERIOD TERMINATION OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED

(Training Officer/Date)

SHIP-TO-SHIP/SHIP-TO-SHORE RADIOTELETYPEWRITER OPERATOR

QUALIFICATION SUMMARY

ning Officer/Date)

FINAL QUALIFICATION AS
OUT-ROUTER

NAME _____ RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors "give away" their signatures, unnecessary difficulties can be expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to ensure awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified OUT-ROUTER (5308).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

SERVICE RECORD ENTRY _____ DATE _____
(Personnel Officer)

OUT-ROUTER

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED

(Training Officer/Date)

FINAL QUALIFICATION AS
IN-ROUTER

ME _____ RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors signify completion of applicable sections either by written or oral examination, by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors "give away" their signatures, unnecessary difficulties can be expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to insure awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee designated a qualified IN-ROUTER (5309).

COMMENDED _____ DATE _____
(Supervisor)

COMMENDED _____ DATE _____
(Division Officer)

COMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

SERVICE RECORD ENTRY _____ DATE _____
(Personnel Officer)

IN-ROUTER

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
SERVICE CLERK

RATE/RANK

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors signify completion of applicable sections either by written or oral examination, or observation of performance. The examination or checkout need not cover every detail; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors "give away" their signatures, unnecessary difficulties may be expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified SERVICE CLERK (5310).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

PERSONNEL RECORD ENTRY _____ DATE _____
(Personnel Officer)

SERVICE CLERK

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED

(Training Officer/Date)

FINAL QUALIFICATION AS
COMMERCIAL TRAFFIC CLERK

NAME _____ RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to ensure awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified COMMERCIAL TRAFFIC CLERK (5311).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

SERVICE RECORD ENTRY _____ DATE _____
(Personnel Officer)

COMMERCIAL TRAFFIC CLERK

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
TRAFFIC CHECKER

RATE/RANK

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This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee designated a qualified TRAFFIC CHECKER (5312).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

RECORD ENTRY _____ DATE _____
(Personnel Officer)

TRAFFIC CHECKER

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
SATELLITE COMMUNICATIONS (SATCOM) SET (AN/WSC-3) OPERATOR

RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated tasks of the Personnel Qualification Standard (PQS). Only specified supervisors certify completion of applicable sections either by written or oral examination, observation of performance. The examination or checkout need not cover every task; however, a sufficient number should be covered to demonstrate the examinee's competence. Should supervisors "give away" their signatures, unnecessary difficulties may be expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to reflect the awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified SATELLITE COMMUNICATIONS (SATCOM) SET (AN/WSC-3) OPERATOR (5313).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

RECOMMENDED _____ DATE _____
(Commanding Officer)

RECOMMENDED _____ DATE _____
(Personnel Officer)

SATELLITE COMMUNICATIONS (SATCOM) SET (AN/WSC-3) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
HIGH-FREQUENCY (HF) TRANSMITTER OPERATOR

RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to reflect the awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified HIGH-FREQUENCY (HF) TRANSMITTER OPERATOR (5314).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

RECOMMENDED _____ DATE _____
(Commanding Officer)

RECORD ENTRY _____ DATE _____
(Personnel Officer)

HIGH-FREQUENCY (HF) TRANSMITTER OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

f:
2

FINAL QUALIFICATION AS
VERY-HIGH-FREQUENCY/ULTRAHIGH-FREQUENCY (VHF/UHF) TRANSCIVER OPERATOR

ME _____ RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors signify completion of applicable sections either by written or oral examination, by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors "give away" their signatures, unnecessary difficulties can be expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to insure awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee designated a qualified VERY-HIGH-FREQUENCY/ULTRAHIGH-FREQUENCY (VHF/UHF) TRANSCIVER OPERATOR (5315).

COMMENDED _____ DATE _____
(Supervisor)

COMMENDED _____ DATE _____
(Division Officer)

COMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

SERVICE RECORD ENTRY _____ DATE _____
(Personnel Officer)

VERY-HIGH-FREQUENCY/ULTRAHIGH-FREQUENCY (VHF/UHF) TRANSCEIVER OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
FLEET SINGLE-CHANNEL RADIOTELETYPEWRITER BROADCAST SYSTEMS
(TYPES K AND M) OPERATOR

RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified FLEET SINGLE-CHANNEL RADIOTELETYPEWRITER BROADCAST SYSTEMS (TYPES K AND M) OPERATOR (5316).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

ADVICE RECORD ENTRY _____ DATE _____
(Personnel Officer)

FLEET SINGLE-CHANNEL RADIOTELETYPEWRITER BROADCAST SYSTEMS
(TYPES K AND M) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
FLEET MULTICHANNEL RADIOTELETYPEWRITER BROADCAST SYSTEM (TYPE N) OPERATOR

E _____ RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to insure awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee designated a qualified FLEET MULTICHANNEL RADIOTELETYPEWRITER BROADCAST SYSTEM (TYPE N) OPERATOR (5317).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

RECORD ENTRY _____ DATE _____
(Personnel Officer)

FLEET MULTICHANNEL RADIOTELETYPEWRITER BROADCAST SYSTEM (TYPE N) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
SYSTEMS CONTROL (TYPES B, C, D AND G) OPERATOR

RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to reflect the awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified SYSTEMS CONTROL (TYPES B, C, D AND G) OPERATOR (5318).

RECOMMENDED _____ DATE _____
 (Supervisor)

RECOMMENDED _____ DATE _____
 (Division Officer)

RECOMMENDED _____ DATE _____
 (Department Head)

RECOMMENDED _____ DATE _____
 (Commanding Officer)

RECORD ENTRY _____ DATE _____
 (Personnel Officer)

SYSTEMS CONTROL (TYPES B, C, D AND G) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
SINGLE-SIDEBAND (SSB)/NARROW-BAND VOICE SYSTEMS (TYPES Y AND S) OPERATOR

NAME _____ RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to ensure awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified SINGLE-SIDEBAND (SSB)/NARROW-BAND VOICE SYSTEMS (TYPES Y AND S) OPERATOR (5319).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

SERVICE RECORD ENTRY _____ DATE _____
(Personnel Officer)

QUALIFICATION SUMMARY

IATION

(Training Officer/Date)

'R/T) CIRCUIT OPERATOR (NAVEDTRA 43307A)

Department Head/Date)

FINAL QUALIFICATION AS
AMPLITUDE-MODULATED/FREQUENCY-MODULATED (AM/FM) WIDEBAND
VOICE SYSTEMS (TYPES R AND U) OPERATOR

RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified AMPLITUDE-MODULATED/FREQUENCY-MODULATED (AM/FM) WIDEBAND VOICE SYSTEMS (TYPES R AND U) OPERATOR (5320).

 (Supervisor) DATE _____

 (Division Officer) DATE _____

 (Department Head) DATE _____

 (Commanding Officer) DATE _____

 (Personnel Officer) DATE _____

AMPLITUDE-MODULATED/FREQUENCY-MODULATED (AM/FM) WIDEBAND
VOICE SYSTEMS (TYPES R AND U) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

RADIOTELEPHONE (R/T) CIRCUIT OPERATOR (NAVEDTRA 43307A)

COMPLETED _____
(Department Head/Date)

FINAL QUALIFICATION AS
CONTINUOUS-WAVE (CW) OPERATOR

NAME _____ RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to ensure awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified CONTINUOUS-WAVE (CW) OPERATOR (5321).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

SERVICE RECORD ENTRY _____ DATE _____
(Personnel Officer)

CONTINUOUS-WAVE (CW) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED

(Training Officer/Date)

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This qualification section is to be maintained by the trainee and updated to reflect the awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified CONTINUOUS-WAVE (CW) SHIP/SHORE/SHIP SYSTEM (TYPE W) OPERATOR (5322).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

PERSONNEL RECORD ENTRY _____ DATE _____
(Personnel Officer)

CONTINUOUS-WAVE (CW) SHIP/SHORE/SHIP SYSTEM (TYPE W) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
QUALITY CONTROL MONITORING SYSTEM OPERATOR

E _____ RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to insure awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee designated a qualified QUALITY CONTROL MONITORING SYSTEM OPERATOR (5323).

RECOMMENDED _____ DATE _____
(Supervisor)

RECOMMENDED _____ DATE _____
(Division Officer)

RECOMMENDED _____ DATE _____
(Department Head)

QUALIFIED _____ DATE _____
(Commanding Officer)

RECORD ENTRY _____ DATE _____
(Personnel Officer)

QUALITY CONTROL MONITORING SYSTEM OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____

(Training Officer/Date)

FINAL QUALIFICATION AS
MULTICHANNEL RADIOTELETYPEWRITER SHIP/SHORE/SHIP
SYSTEM (TYPE P) OPERATOR

RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors certify completion of applicable sections either by written or oral examination, observation of performance. The examination or checkout need not cover every section, however, a sufficient number should be covered to demonstrate the examinee's competence. Should supervisors "give away" their signatures, unnecessary difficulties are expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

CATION

When observed satisfactory performance, it is recommended the trainee be designated a qualified MULTICHANNEL RADIOTELETYPEWRITER SHIP/SHORE/SHIP SYSTEM (TYPE P) OPERATOR (5324).

DESIGNED BY _____ DATE _____
 (Supervisor)

DESIGNED BY _____ DATE _____
 (Division Officer)

DESIGNED BY _____ DATE _____
 (Department Head)

DESIGNED BY _____ DATE _____
 (Commanding Officer)

RECORD ENTRY BY _____ DATE _____
 (Personnel Officer)

MULTICHANNEL RADIOTELETYPEWRITER SHIP/SHORE/SHIP
SYSTEM (TYPE P) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FINAL QUALIFICATION AS
FLEET SECURE VOICE COMMUNICATIONS (FLTSEVOCOM) OPERATOR

 RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to the awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified FLEET SECURE VOICE COMMUNICATIONS (FLTSEVOCOM) OPERATOR (5325).

RECOMMENDED _____ DATE _____
 (Supervisor)

RECOMMENDED _____ DATE _____
 (Division Officer)

RECOMMENDED _____ DATE _____
 (Department Head)

RECOMMENDED _____ DATE _____
 (Commanding Officer)

RECOMMENDED _____ DATE _____
 (Personnel Officer)

FLEET SECURE VOICE COMMUNICATIONS (FLTSEVOCOM) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

RADIOTELEPHONE (R/T) CIRCUIT OPERATOR (NAVEDTRA 43307A)

COMPLETED _____
(Department Head/Date)

FINAL QUALIFICATION AS
NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) OPERATOR

RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) OPERATOR (5326).

 (Supervisor) DATE _____

 (Division Officer) DATE _____

 (Department Head) DATE _____

 (Commanding Officer) DATE _____

 (Personnel Officer) DATE _____

NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED

(Training Officer/Date)

FINAL QUALIFICATION AS
FACILITIES CONTROL (FACCON) WATCH OPERATOR

RATE/RANK _____

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This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

CATION

When observed satisfactory performance, it is recommended the trainee be designated a qualified FACILITIES CONTROL (FACCON) WATCH OPERATOR (5327).

 (Supervisor) DATE _____

 (Division Officer) DATE _____

 (Department Head) DATE _____

 (Commanding Officer) DATE _____

RECORD ENTRY _____
 (Personnel Officer) DATE _____

FACILITIES CONTROL (FACCON) WATCH OPERATOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

SATELLITE COMMUNICATIONS (SATCOM) SET (AN/WSC-3) OPERATOR (NAVEDTRA 43355

COMPLETED _____
(Department Head/Date)

HIGH-FREQUENCY (HF) TRANSMITTER OPERATOR (NAVEDTRA 43355-5AQ14)

COMPLETED _____
(Department Head/Date)

VERY-HIGH-FREQUENCY/ULTRAHIGH-FREQUENCY (VHF/UHF) TRANSCEIVER OPERATOR
(NAVEDTRA 43355-5AQ15)

COMPLETED _____
(Department Head/Date)

FLEET SINGLE-CHANNEL RADIOTELETYPEWRITER BROADCAST SYSTEMS (TYPE K AND M)
(NAVEDTRA 43355-5AQ16)

COMPLETED _____
(Department Head/Date)

FLEET MULTICHANNEL RADIOTELETYPEWRITER BROADCAST SYSTEM (TYPE N) OPERATOR
(NAVEDTRA 43355-5AQ17)

COMPLETED _____
(Department Head/Date)

SYSTEMS CONTROL (TYPES B, C, D AND G) OPERATOR (NAVEDTRA 43355-5AQ18)

COMPLETED _____
(Department Head/Date)

SINGLE-SIDE-BAND (SSB) NARROW-BAND VOICE SYSTEMS (TYPES Y AND S) OPERATOR
(NAVEDTRA 43355-5AQ19)

COMPLETED _____
(Department Head/Date)

AMPLITUDE-MODULATED/FREQUENCY-MODULATED (AM/FM) WIDEBAND VOICE SYSTEMS
(TYPES R AND U) OPERATOR (NAVEDTRA 43355-5AQ20)

COMPLETED _____
(Department Head/Date)

ICATION SUMMARY (CONT'D)

IOUS-WAVE (CW) SHIP/SHORE/SHIP SYSTEM (TYPE W) OPERATOR
FRA 43355-5AQ22)

ED _____
Department Head/Date)

Y CONTROL MONITORING SYSTEM OPERATOR (NAVEDTRA 53355-5AQ23)

ED _____
Department Head/Date)

CHANNEL RADIOTELETYPEWRITER SHIP/SHORE/SHIP SYSTEM (TYPE P) OPERATOR
FRA 53355-5AQ24)

ED _____
Department Head/Date)

SECURE VOICE COMMUNICATIONS (FLTSEVOCOM) OPERATOR (NAVEDTRA 43355-5AQ25)

ED _____
Department Head/Date)

MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) OPERATOR
FRA 43355-5AQ26)

ED _____
Department Head/Date)

FINAL QUALIFICATION AS
FACILITIES CONTROL (FACCON) WATCH SUPERVISOR

RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated tasks of the Personnel Qualification Standard (PQS). Only specified supervisors certify completion of applicable sections either by written or oral examination, observation of performance. The examination or checkout need not cover every task; however, a sufficient number should be covered to demonstrate the examinee's competence. Should supervisors "give away" their signatures, unnecessary difficulties may be expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to reflect awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified FACILITIES CONTROL (FACCON) WATCH SUPERVISOR (5328).

RECOMMENDED _____ DATE _____
 (Supervisor)

RECOMMENDED _____ DATE _____
 (Division Officer)

RECOMMENDED _____ DATE _____
 (Department Head)

RECOMMENDED _____ DATE _____
 (Commanding Officer)

RECORD ENTRY _____ DATE _____
 (Personnel Officer)

FACILITIES CONTROL (FACCON) WATCH SUPERVISOR

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

FACILITIES CONTROL (FACCON) WATCH OPERATOR (NAVEDTRA 43355-5AQ27)

COMPLETED _____
Department Head/Date)

FINAL QUALIFICATION AS
RADIO SUPERVISOR

 RATE/RANK

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This qualification section is to be maintained by the trainee and updated to reflect the awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified RADIO SUPERVISOR (5329).

RECOMMENDED _____ DATE _____
 (Supervisor)

RECOMMENDED _____ DATE _____
 (Division Officer)

RECOMMENDED _____ DATE _____
 (Department Head)

RECOMMENDED _____ DATE _____
 (Commanding Officer)

RECOMMENDED _____ DATE _____
 (Personnel Officer)

RADIO SUPERVISOR
QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

MESSAGE REPRODUCTION/DISTRIBUTION CLERK (NAVEDTRA 43355-5AQ1)

COMPLETED _____
(Department Head/Date)

TAPE CUTTER (NAVEDTRA 43355-5AQ2)

COMPLETED _____
(Department Head/Date)

FILE CLERK (NAVEDTRA 43355-5AQ3)

COMPLETED _____
(Department Head/Date)

COMMUNICATIONS PUBLICATIONS CORRECTIONS CLERK (NAVEDTRA 43355-5AQ4)

COMPLETED _____
(Department Head/Date)

FLEET BROADCAST OPERATOR (NAVEDTRA 43355-5AQ5)

COMPLETED _____
(Department Head/Date)

FULL-PERIOD TERMINATION OPERATOR (NAVEDTRA 43355-5AQ6)

COMPLETED _____
(Department Head/Date)

SHIP-TO-SHIP/SHIP-TO-SHORE RADIOTELETYPEWRITER OPERATOR (NAVEDTRA 43355-5AQ7)

COMPLETED _____
(Department Head/Date)

OUT-ROUTER (NAVEDTRA 43355-5AQ8)

COMPLETED _____
(Department Head/Date)

IN-ROUTER (NAVEDTRA 43355-5AQ9)

COMPLETED _____
(Department Head/Date)

SERVICE CLERK (NAVEDTRA 43355-5AQ10)

COMPLETED

IFICATION SUMMARY (CONT'D)

ERIAL TRAFFIC CLERK (NAVEDTRA 43355-5AQ11)

LETED _____
(Department Head/Date)

IC CHECKER (NAVEDTRA 43355-5AQ12)

LETED _____
(Department Head/Date)

INUOUS-WAVE (CW) OPERATOR (NAVEDTRA 43355-5AQ21)

LETED _____
(Department Head/Date)

ILITIES CONTROL (FACCON) WATCH SUPERVISOR (NAVEDTRA 43355-5AQ28)

LETED _____
(Department Head/ Date)

FINAL QUALIFICATION AS
COMMUNICATIONS WATCH OFFICER (CWO)

RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated portions of the Personnel Qualification Standard (PQS). Only specified supervisors signify completion of applicable sections either by written or oral examination, observation of performance. The examination or checkout need not cover every section, however, a sufficient number should be covered to demonstrate the examinee's competence. Should supervisors "give away" their signatures, unnecessary difficulties are expected in future routine operations.

This qualification section is to be maintained by the trainee and updated to reflect the awareness of remaining tasks.

QUALIFICATION

Having observed satisfactory performance, it is recommended the trainee be designated a qualified COMMUNICATIONS WATCH OFFICER (CWO) (5330).

RECOMMENDED _____ DATE _____
 (Supervisor)

RECOMMENDED _____ DATE _____
 (Division Officer)

RECOMMENDED _____ DATE _____
 (Department Head)

RECOMMENDED _____ DATE _____
 (Commanding Officer)

RECOMMENDED _____ DATE _____
 (Personnel Officer)

COMMUNICATIONS WATCH OFFICER (CWO)

QUALIFICATION SUMMARY

PQS INDOCTRINATION

COMPLETED _____
(Training Officer/Date)

RADIO SUPERVISOR (NAVEDTRA 43355-5AQ29)

COMPLETED _____
(Department Head/Date)

Estimated completion time: 12 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101 thru 5104, 5106, 5111, 5121, 5123, 5126
(70% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What safety precautions must be observed?
- C. Perform this task.

Prepare messages for reproduction

(Signature) (Date)

Reproduce messages

(Signature) (Date)

Collate and staple multipage messages

(Signature) (Date)

Slot message copies

(Signature) (Date)

Verify authorization list prior to delivering messages

(Signature) (Date)

Operate pneumatic tubes and bunnies

(Signature) (Date)

Completion of .1 area comprises 20% of watchstation.

INFREQUENT TASKS - None to be discussed.

5301.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Message backlogs

A	B	C	D	E	F
X	X	X	X	X	X

(Signature) (Date)

.32 Faulty reproduction equipment

X	X	X	X	X	X
---	---	---	---	---	---

(Signature) (Date)

.33 Message processed out of precedence sequence

X	X	X	X	X	X
---	---	---	---	---	---

(Signature) (Date)

.34 Improper security classification markings on messages

X	X	X	X	X	X
---	---	---	---	---	---

(Signature) (Date)

Completion of .3 area comprises 5% of watchstation.

5301.4 EMERGENCIES

For the emergency conditions listed below:

- A. What indications and alarms are received?
- B. What are the probable causes?
- C. What operating limitations are imposed?
- D. How does this emergency affect other operations/equipment/watchstations?
- E. Perform or simulate the immediate action for this emergency condition.

.41 Loss of reproduction equipment

(Signature) (Date)

EMERGENCIES (CONT'D)

Nondelivery/late delivery

(Signature) (Date)

Compromise

(Signature) (Date)

Completion of .4 area comprises 5% of watchstation.

WATCHES - None.

Estimated completion time: 12 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5102, 5104, 5105, 5111, 5120, 5123, 5126
(90% of watchstation)

Systems: 5201, 5252 (5% of watchstation)

5302.1 TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What safety precautions must be observed?
- C. Perform this task.

		<u>A</u>	<u>B</u>	<u>C</u>
.11	Energize TTY	X	X	X
	(Signature) _____ (Date) _____			
.12	Obtain message draft for tape cutting	X	X	X
	(Signature) _____ (Date) _____			
.13	Verify completeness of message draft	X	X	X
	(Signature) _____ (Date) _____			
.14	Cut tape from message draft in various formats	X	X	X
	(Signature) _____ (Date) _____			
.15	Compare tape and TTY printout with original message draft for accuracy and completeness	X	X	X
	(Signature) _____ (Date) _____			
.16	Pass tape, TTY printout and original message draft to proofreader	X	X	X
	(Signature) _____ (Date) _____			
.17	Change TTY printer paper/ribbon	X	X	X
	(Signature) _____ (Date) _____			

5302.1 TASKS (CONT'D)

.18 Change TTY perforator ribbon/tape

A B C
X X X

(Signature) _____ (Date)

.19 Change TTY reperforator ribbon/tape

X X X

(Signature) _____ (Date)

.110 Correct improperly prepared message tapes

X X X

(Signature) _____ (Date)

Completion of .1 area comprises 5% of watchstation.

5302.2 INFREQUENT TASKS - None to be discussed.

5302.3 ABNORMAL CONDITIONS - None to be discussed.

5302.4 EMERGENCIES - None to be discussed.

5302.5 WATCHES - None.

Estimated completion time: 4 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5103, 5104, 5106, 5126 (85% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What safety precautions must be observed?
- C. Perform this task.

File incoming and outgoing messages

(Signature) (Date)

Maintain all communications files

(Signature) (Date)

File all logs

(Signature) (Date)

Prepare and file ticklers/fillers

(Signature) (Date)

Assist in preparing superseded files, logs and records for destruction

(Signature) (Date)

Completion of .1 area comprises 10% of watchstation.

INFREQUENT TASKS - None to be discussed.

5303.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Improperly filed messages

(Signature) (Date)

.32 Destroying still effective files and logs

(Signature) (Date)

.33 Failure to file re-addressed messages using original DTG

(Signature) (Date)

.34 Failure to prepare and file ticklers/fillers

(Signature) (Date)

.35 Mislabeled files

(Signature) (Date)

.36 Missing general messages

(Signature) (Date)

Completion of .3 area comprises 5% of watchstation.

5303.4 EMERGENCIES - None to be discussed.

5303.5 WATCHES - None.

Estimated completion time: 4 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5105 thru 5107, 5123, 5126 (85% of watchstation)

5304.1 TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What safety precautions must be observed?
- D. Perform this task.

.11 Record pen-and-ink corrections to publications

(Signature) (Date)

.12 Record a page change to a publication

(Signature) (Date)

.13 Page check a publication against list of effective pages (LEP)

(Signature) (Date)

.14 Report all discrepancies to proper authority

(Signature) (Date)

.15 Destroy residue IAW letter of promulgation

(Signature) (Date)

.16 Handle procedures unique to microfiche publications

(Signature) (Date)

.17 Update watch-to-watch inventory

(Signature) (Date)

Completion of .1 area comprises 10% of watchstation.

5304.2 INFREQUENT TASKS - None to be discussed.

5304.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

- .31 Failure to make publication corrections to meet prescribed effective date

(Signature) (Date)

- .32 Failure to make publication corrections in sequential order

(Signature) (Date)

- .33 Failure to page check against new LEP

(Signature) (Date)

- .34 Failure to maintain record of page changes

(Signature) (Date)

- .35 Failure to denote authority for pen-and-ink corrections on each corrected page

(Signature) (Date)

- .36 Pen-and-ink publication corrections made with red ink

(Signature) (Date)

Completion of .3 area comprises 5% of watchstation.

5304.4 EMERGENCIES - None to be discussed.

5304.5 WATCHES - None.

Estimated completion time: 4 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5104 thru 5106, 5108, 5123, 5126
(80% of watchstation)

Systems: 5201, 5252 (5% of watchstation)

5.1 TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What safety precautions must be observed?
- D. Perform this task.

.11 Remove messages from TTY	<table border="0"><tr><td>A</td><td>B</td><td>C</td><td>D</td></tr><tr><td>X</td><td>X</td><td>X</td><td>X</td></tr></table>	A	B	C	D	X	X	X	X
A	B	C	D						
X	X	X	X						

(Signature) (Date)

.12 Assign time of receipt	<table border="0"><tr><td>X</td><td>X</td><td>X</td></tr></table>	X	X	X
X	X	X		

(Signature) (Date)

.13 Maintain broadcast continuity log	<table border="0"><tr><td>X</td><td>X</td><td>X</td><td>X</td></tr></table>	X	X	X	X
X	X	X	X		

(Signature) (Date)

.14 Check message addressees against guard list	<table border="0"><tr><td>X</td><td>X</td><td>X</td></tr></table>	X	X	X
X	X	X		

(Signature) (Date)

.15 Prepare broadcast filler	<table border="0"><tr><td>X</td><td>X</td></tr></table>	X	X
X	X		

(Signature) (Date)

.16 Maintain broadcast file	<table border="0"><tr><td>X</td><td>X</td><td>X</td><td>X</td></tr></table>	X	X	X	X
X	X	X	X		

(Signature) (Date)

.17 Process messages addressed to command's guard list	<table border="0"><tr><td>X</td><td>X</td><td>X</td><td>X</td></tr></table>	X	X	X	X
X	X	X	X		

(Signature) (Date)

5305.1 TASKS (CONT'D)

.18 Maintain missing number list

A	B	C	D
X	X	X	X

(Signature)	(Date)
-------------	--------

.19 Screen rerun channel for missing numbers

X	X	X	X
---	---	---	---

(Signature)	(Date)
-------------	--------

.110 Handle FLASH message

X	X	X	X
---	---	---	---

(Signature)	(Date)
-------------	--------

.111 Handle IMMEDIATE message

X	X	X	X
---	---	---	---

(Signature)	(Date)
-------------	--------

.112 Handle emergency action message

X	X	X	X
---	---	---	---

(Signature)	(Date)
-------------	--------

.113 Close out broadcast

X			X
---	--	--	---

(Signature)	(Date)
-------------	--------

.114 Change TTY printer ribbon

X	X	X	X
---	---	---	---

(Signature)	(Date)
-------------	--------

.115 Change TTY printer paper

X	X	X	X
---	---	---	---

(Signature)	(Date)
-------------	--------

.116 Report abnormalities

X	X	X	X
---	---	---	---

(Signature)	(Date)
-------------	--------

Completion of .1 area comprises 5% of watchstation.

5305.2 INFREQUENT TASKS - None to be discussed.

05.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 TTY malfunction

(Signature) (Date)

.32 Garbled input signal

(Signature) (Date)

.33 TTY setting at idle

(Signature) (Date)

.34 Noncompliance with message quality standards

(Signature) (Date)

.35 TTY paper jammed

(Signature) (Date)

.36 Ribbon jammed

(Signature) (Date)

.37 Unauthorized personnel tampering with equipment

(Signature) (Date)

.38 Improper watch-to-watch turnover

(Signature) (Date)

Completion of .3 area comprises 5% of watchstation.

05.4 EMERGENCIES - None to be discussed.

SIGNATURE

DATE

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 4 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5102, 5104 thru 5106, 5109, 5110, 5123, 5126
(75% of watchstation)

Systems: 5201, 5252, 5254 (5% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What safety precautions must be observed?
- D. Perform this task.

	A	B	C	D
1 Set up and maintain message continuity logs	X			X
(Signature) _____ (Date) _____				
2 Initiate callup with terminated station	X	X		X
(Signature) _____ (Date) _____				
3 Verify SOM/EOM functions on outgoing tapes	X			X
(Signature) _____ (Date) _____				
4 Transmit messages to terminated station	X	X	X	X
(Signature) _____ (Date) _____				
5 Affix TOR/TOD to messages	X			X
(Signature) _____ (Date) _____				
6 Ensure acknowledgment of receipt from terminated station	X	X		X
(Signature) _____ (Date) _____				
7 Route back outgoing message for internal processing	X	X		X
(Signature) _____ (Date) _____				

5306.1 TASKS (CONT'D)

- ```
.18 Handle IMMEDIATE outgoing message
```

(Signature) (Date)

- .19 Coordinate with terminated station for receipt of incoming messages

(Signature) \_\_\_\_\_ (Date) \_\_\_\_\_

- ```
.110 Pass incoming messages for processing
```

(Signature) (Date)

- ```
.111 Handle FLASH incoming message
```

(Signature) \_\_\_\_\_ (Date) \_\_\_\_\_

- ```
.112 Handle IMMEDIATE incoming message
```

(Signature) (Date)

- ### .113 Handle emergency action message

(Signature) (Date)

- .114 Handle incoming special category message IAW local SOP

(Signature) (Date)

- .115 Request retransmission of garbled or missing message

(Signature) (Date)

- .116 Answer request for retransmission of garbled or missing message

(Signature) (Date)

- .117 Hold daily closeout with terminated station

(Signature) _____ (Date) _____

1 TASKS (CONT'D)

- .118 Conduct periodic circuit continuity checks when circuit not used continuously

A B C D

X X X X

(Signature) _____ (Date) _____

- .119 Report abnormalities to Watch Supervisor

X X X X

(Signature) _____ (Date) _____

Completion of .1 area comprises 5% of watchstation.

2 INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What conditions require this infrequent task?
- D. Perform or simulate this task.

- .21 Operate during EMCON conditions

A B C D
X X X X

(Signature) _____ (Date) _____

- .22 Handle outgoing FLASH message

X X X

(Signature) _____ (Date) _____

- .23 Handle outgoing special category message IAW SOP

X X X X

(Signature) _____ (Date) _____

Completion of .2 area comprises 5% of watchstation.

3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

- .31 Improper circuit discipline

5306.3 ABNORMAL CONDITIONS (CONT'D)

- .32 Improper use of operating signals

(Signature) (Date)

- .33 Failure of terminating and terminated units to promptly receipt for messages

(Signature) (Date)

Incoming message backlog

(Date)

message backlog

(Signature) (Date)

- .36 Noncompliance with criteria for logging out incoming channels

(Signature) (Date)

- .37 Transmitting messages out of precedence sequence

(Signature) (Date)

- .38 Improper watch-to-watch turnover

(Signature) (Date)

- .39 TTY malfunction

(Signature) (Date)

- .310 Loss of incoming signal

(Signature) (Date)

- .311 TTY setting at idle when terminated station is sending traffic

(Signature) (Date)

- .312 Power fluctuations

NORMAL CONDITIONS (CONT'D)

compliance with criteria for logging out send channels

(Signature) (Date)

Completion of .3 area comprises 5% of watchstation.

EMERGENCIES - None to be discussed.

WATCHES

and 3 satisfactory watches under qualified supervision.

SIGNATURE DATE

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 4 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5102, 5104 thru 5106, 5109, 5110, 5121, 5123,
5126 (70% of watchstation)

Systems: 5201, 5252, 5254, 5262 (5% of watchstation)

TASKS

For the operations listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What safety precautions must be observed?
- D. Perform this task.

1 Set up and maintain circuit logs

A	B	C	D
X			X

(Signature) (Date)

2 Initiate callup

X	X	X	
---	---	---	--

(Signature) (Date)

3 Transmit messages

X	X	X	X
---	---	---	---

(Signature) (Date)

4 Ensure acknowledgment of receipt by all addressees

X	X	X	
---	---	---	--

(Signature) (Date)

5 Affix TOR/TOD to messages

X		X	
---	--	---	--

(Signature) (Date)

6 Route back message for internal processing

X		X	X
---	--	---	---

(Signature) (Date)

7 Handle IMMEDIATE outgoing message

X	X	X	
---	---	---	--

(Signature) (Date)

5307.1 TASKS (CONT'D)

- .18 Acknowledge receipt of incoming message

A B C
X X

(Signature) (Date)

- .19 Deliver advance copy as precedence and message content dictate

X X

(Signature) (Date)

- .110 Handle FLASH incoming message

X X

(Signature) (Date)

- .111 Handle IMMEDIATE incoming message

X X

(Signature) (Date)

- .112 Request retransmission of garbled or missing message

X X

(Signature) (Date)

- .113 Answer request for retransmission of garbled or missing message

X X

(Signature) (Date)

- .114 Verify SOM/EOM functions for messages to be relayed/transmitted

X X

(Signature) (Date)

- .115 Hold daily closeout

X X

(Signature) (Date)

- .116 Serve as Net Control Station

X X

(Signature) (Date)

- .117 Report abnormalities to Watch Supervisor

X

(Signature) (Date)

Completion of .1 area comprises 5% of watchstation.

INFREQUENT TASKS

For the infrequent tasks listed below:

1. What are the steps of this procedure?
2. What communications must be established?
3. What conditions require this infrequent task?
4. Perform or simulate this task.

Operate during EMCON conditions

(Signature) (Date)

Operate with special procedures used during joint/allied operations

(Signature) (Date)

Operate with special submarine guard procedures

(Signature) (Date)

Handle FLASH outgoing message

(Signature) (Date)

Handle special category message

(Signature) (Date)

Completion of .2 area comprises 5% of watchstation.

ABNORMAL CONDITIONS

For the abnormal conditions listed below:

1. What indications and alarms are received?
2. What immediate action is required?
3. What are the probable causes?
4. What operating limitations are imposed?
5. How does this condition affect other operations/equipment/watchstations?
6. Perform or simulate the corrective/immediate action for this abnormal condition.

Improper circuit discipline

(Signature) (Date)

Improper use of operating signals

5307.3 ABNORMAL CONDITIONS (CONT'D)

- .33 Failure to promptly receipt for messages

(Signature) (Date)

- .34 Incoming message backlog

(Signature) (Date)

- .35 Outgoing message backlog

(Signature) (Date)

- .36 Failure to comply with order of transmission list

(Signature) (Date)

- .37 Improper watch-to-watch turnover

(Signature) (Date)

- .38 TTY malfunctions

(Signature) (Date)

- .39 Loss of signal

(Signature) (Date)

- .310 Power fluctuations

(Signature) (Date)

- .311 Failure to listen before transmitting

(Signature) (Date)

- .312 Unauthorized personnel tampering with equipment

(Signature) (Date)

- .313 Loss of TTY

(Signature) (Date)

ABNORMAL CONDITIONS (CONT'D)

loss of power

(Signature) (Date)

loss of audio monitor

(Signature) (Date)

loss of transmitter

(Signature) (Date)

Completion of .3 area comprises 10% of watchstation.

EMERGENCIES - None to be discussed.

WATCHES

stand 3 satisfactory watches under qualified supervision.

SIGNATURE DATE

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 6 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101 thru 5107, 5109, 5111, 5117, 5126
(80% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What safety precautions must be observed?
- C. Perform this task.

	A	B	C
Verify completeness of outgoing messages	X	X	X
_____ (Signature) _____ (Date)			
Verify time of receipt (time stamp)	X	X	
_____ (Signature) _____ (Date)			
Verify all addressees against Plain Language Address Directory (PLAD)	X	X	
_____ (Signature) _____ (Date)			
Assign station serial number	X	X	
_____ (Signature) _____ (Date)			
Assign DTG	X	X	
_____ (Signature) _____ (Date)			
Designate circuits to be used for transmission of messages	X	X	X
_____ (Signature) _____ (Date)			
Maintain outgoing message log	X	X	X
_____ (Signature) _____ (Date)			

5308.1 TASKS (CONT'D)

.18 Deliver messages to tape cutting area

A B C
X X X

(Signature) (Date)

.19 Verify completeness and accuracy of all outgoing message tapes prior to transmission

X X X

(Signature) (Date)

.110 Deliver outgoing message tapes to designated circuits for transmission

X X X

(Signature) (Date)

Completion of .1 area comprises 15% of watchstation.

5308.2 INFREQUENT TASKS - None to be discussed.

5308.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Failure to process outgoing messages in precedence sequence

(Signature) (Date)

.32 Messages prepared in improper format

(Signature) (Date)

Completion of .3 area comprises 5% of watchstation.

5308.4 EMERGENCIES - None to be discussed.

5308.5 WATCHES - None.

Estimated completion time: 6 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5103, 5104, 5106, 5110, 5118, 5121, 5126
(80% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What safety precautions must be observed?
- C. Perform this task.

	A	B	C
Handle messages according to precedence	X	X	X

(Signature) (Date)

Verify message time of receipt/transmission	X	X	
---	---	---	--

(Signature) (Date)

Maintain dupe log	X	X	
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(Signature) (Date)

Affix appropriate classification markings to messages	X	X	X
---	---	---	---

(Signature) (Date)

Verify addressees against guard list	X	X	
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(Signature) (Date)

Internally route messages IAW distribution guides	X	X	X
---	---	---	---

(Signature) (Date)

Advance route high precedence message	X	X	X
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(Signature) (Date)

.18 Process death notification message IAW SOP

(Signature) _____ (Date) _____

.19 In-route personal telegram IAW SOP

X X X

(Signature) _____ (Date) _____

.110 In-route SPECIAL HANDLING required message IAW SOP

X X X

(Signature) _____ (Date) _____

.111 In-route personal-for message

X X X

(Signature) _____ (Date) _____

Completion of .1 area comprises 15% of watchstation.

5309.2 INFREQUENT TASKS - None to be discussed.

5309.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Message backlog

(Signature) _____ (Date) _____

.32 Improperly maintained logs

(Signature) _____ (Date) _____

.33 Security violations

(Signature) _____ (Date) _____

.34 Failure to process messages in precedence sequence

(Signature) _____ (Date) _____

Signature) (Date)

Completion of .3 area comprises 5% of watchstation.

EMERGENCIES - None to be discussed.

WATCHES - None.

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101 thru 5108, 5110, 5111, 5120, 5126
(80% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What safety precautions must be observed?
- C. Perform this task.

1 Draft broadcast screen request

(Signature) (Date)

2 Draft retransmission request for incomplete, garbled and missing messages

(Signature) (Date)

3 Draft service message pertaining to misrouted, missent messages

(Signature) (Date)

4 Draft service message correcting previously transmitted message

(Signature) (Date)

5 Draft suspected duplicate service

(Signature) (Date)

6 Draft straggler service

(Signature) (Date)

7 Draft request for time of receipt service

(Signature) (Date)

8 Draft answer to retransmission request for incomplete, garbled and missing messages

(Signature) (Date)

5310.1 TASKS (CONT'D)

.19 Handle suspected duplicate service

(Signature) (Date)

.110 Handle straggler service

(Signature) (Date)

.111 Handle request for time of receipt service

(Signature) (Date)

.112 Make corrections to incoming and outgoing messages

(Signature) (Date)

.113 Maintain station service log

(Signature) (Date)

.114 Maintain station service file

(Signature) (Date)

.115 Draft/handle tracer action required messages

(Signature) (Date)

Completion of .1 area comprises 20% of watchstation.

5310.2 INFREQUENT TASKS - None to be discussed.

5310.3 ABNORMAL CONDITIONS - None to be discussed.

5310.4 EMERGENCIES - None to be discussed.

5310.5 WATCHES - None.

Estimated completion time: 6 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101 thru 5106, 5111, 5120, 5126
(80% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What control/coordination is required?
- D. What safety precautions must be observed?
- E. Perform this task.

Draft Class E message for transmission

A	B	C	D	E
X	X		X	X

(Signature) (Date)

Draft Class E message for transmission to
North America

X	X	X	X	X
---	---	---	---	---

(Signature) (Date)

Prepare Class E abstracts and reports

X	X		X	X
---	---	--	---	---

(Signature) (Date)

Prepare local audit form

X	X			X
---	---	--	--	---

(Signature) (Date)

Maintain SRS log

X	X			X
---	---	--	--	---

(Signature) (Date)

Maintain commercial traffic funds

X	X		X	X
---	---	--	---	---

(Signature) (Date)

Maintain commercial traffic files

X	X			X
---	---	--	--	---

(Signature) (Date)

5311.2 INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. Perform or simulate this task.

- .21 Draft Class D message for transmission

(Signature) (Date)

- .22 Draft Class D with E privilege message for transmission

(Signature) (Date)

- .23 Prepare Class D abstracts and reports

(Signature) (Date)

- .24 Prepare press message for transmission

(Signature) (Date)

- .25 Prepare refund message

(Signature) (Date)

Completion of .2 area comprises 5% of watchstation.

- 5311.3 ABNORMAL CONDITIONS - None to be discussed.

- 5311.4 EMERGENCIES - None to be discussed.

- 5311.5 WATCHES - None.

Estimated completion time: 12 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101 thru 5108, 5110, 5111, 5120, 5126
(85% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What safety precautions must be observed?
- C. Perform this task.

Examine heading, text and ending of messages

(Signature) (Date)

Determine if message has been handled IAW local SOP

(Signature) (Date)

Check routing indicators to ensure delivery to all addressees

(Signature) (Date)

Check breakdown of call signs and address indicating groups
and CADS

(Signature) (Date)

Check continuity of station serial numbers

(Signature) (Date)

Check serial number continuity of circuit/broadcast logs

(Signature) (Date)

Compare originator's rough draft against circuit copy

(Signature) (Date)

Check operator's sign and TOD/TOR

(Signature) (Date)

5312.1 TASKS (CONT'D)

.19 Check internal routing

(Signature) (Date)

.110 Check messages for security violations

(Signature) (Date)

.111 Verify duplicated message quality

(Signature) (Date)

.112 Notify proper authority of discrepancies that may lead to
inordinate delay/nondelivery of messages

(Signature) (Date)

.113 Maintain records for future use in traffic analysis

(Signature) (Date)

.114 Draft communication improvement memo (CIM)

(Signature) (Date)

Completion of .1 area comprises 15% of watchstation.

5312.2 INFREQUENT TASKS - None to be discussed.

5312.3 ABNORMAL CONDITIONS - None to be discussed.

5312.4 EMERGENCIES - None to be discussed.

5312.5 WATCHES - None.

Estimated completion time: 12 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5105, 5109, 5112 thru 5114, 5123, 5126
(65% of watchstation)

Systems: 5214 (5% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What safety precautions must be observed?
- D. Perform this task.

Energize set

(Signature) (Date)

Adjust for proper azimuth/elevation

(Signature) (Date)

Set up specified frequency for channelized selection

(Signature) (Date)

Select mode of operation

(Signature) (Date)

Set transceiver for remote preselect operation

(Signature) (Date)

Adjust power level for proper output

(Signature) (Date)

Obtain power calibration

(Signature) (Date)

5313.2 INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What limitations are imposed?
- D. What conditions require this infrequent task?
- E. Perform or simulate this task.

.21 Operate in manual mode

(Signature) (Date)

.22 Operate in receive-only mode

(Signature) (Date)

.23 Operate in transmit-only mode

(Signature) (Date)

.24 Operating in line-of-sight mode

(Signature) (Date)

Completion of .2 area comprises 5% of watchstation.

5313.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Loss of reception

(Signature) (Date)

.32 Use of excessive power

EMERGENCIES - None to be discussed.

WATCHES

Stand 3 satisfactory watches under qualified supervision.

SIGNATURE

DATE

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 12 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5105, 5106, 5109, 5110, 5112, 5113, 5117, 5118,
5121, 5123, 5126 (50% of watchstation)

Systems: 5222, 5223, 5227 thru 5230, 5232, 5233, 5240, 5241, 5252,
5253, 5257 thru 5260, 5262, 5263, 5265 (25% of watchstation)

4.1 TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What control/coordination is required?
- D. What safety precautions must be observed?
- E. What parameters must be monitored?
- F. Perform this task.

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>
.11 Tune transmitters in auto and manual modes (as directed by FACCON)	X	X	X	X	X	X

(Signature) (Date)

.12 Patch and tune appropriate antenna coupler in auto and manual modes (as directed by FACCON)	X	X	X	X	X	X
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(Signature) (Date)

.13 Patch required audio/DC lines	X	X	X	X	X	X
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(Signature) (Date)

.14 Maintain required logs and files	X	X				X
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(Signature) (Date)

.15 Maintain status board	X	X				X
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(Signature) (Date)

.16 Report all abnormalities to watch/FACCON supervisor	X	X	X			X
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(Signature) (Date)

5314.1 TASKS (CONT'D)A B C D E F

- .17 Operate using limited range intercept/low probability intercept (LRI/LPI)

X X X X X X

(Signature) (Date)

- .18 Detect muting operation

X X X X X

(Signature) (Date)

- .19 Operate under EMCON

X X X X X

(Signature) (Date)

Completion of .1 area comprises 5% of watchstation.

5314.2 INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What control/coordination is required?
- D. What safety precautions must be observed?
- E. What parameters must be monitored?
- F. What conditions require this infrequent task?
- G. Perform or simulate this task.

- .21 Operate under HERO conditions

(Signature) (Date)

- .22 Operate under RADHAZ conditions

(Signature) (Date)

- .23 Operate under total loss of FACCON

(Signature) (Date)

Completion of .2 area comprises 5% of watchstation.

ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. What emergencies or malfunctions may occur if immediate action is not taken?
- F. How does this condition affect other operations/equipment watchstations?
- G. What followup action is required?
- H. Perform or simulate the corrective/immediate action for this abnormal condition.

Loss of external frequency standard

A	B	C	D	E	F	G	H
X	X	X	X	X	X	X	X

(Signature) (Date)

Excessive equipment ambient temperatures

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

Improper signal levels

X	X	X		X	X		X
---	---	---	--	---	---	--	---

(Signature) (Date)

Improper patching

X	X	X		X	X		X
---	---	---	--	---	---	--	---

(Signature) (Date)

Loss of primary internal communications

X	X	X	X		X	X	X
---	---	---	---	--	---	---	---

(Signature) (Date)

Power fluctuations (60-/400-Hz)

X	X	X	X	X	X		X
---	---	---	---	---	---	--	---

(Signature) (Date)

Improper frequency separation

X	X	X	X	X	X		X
---	---	---	---	---	---	--	---

(Signature) (Date)

Loss of couplers/matrix

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

5314.3 ABNORMAL CONDITIONS (CONT'D)

A	B	C	D	E	F	G	H
X	X	X	X	X	X	X	X

.39 Loss of 400-Hz power

(Signature)	(Date)
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.310 Loss of 60-Hz power

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature)	(Date)
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.311 Blown fuses

X	X	X	X		X	X	X
---	---	---	---	--	---	---	---

(Signature)	(Date)
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.312 Open RF patch cord

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature)	(Date)
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.313 Loss of RF signal

X	X	X	X		X	X	X
---	---	---	---	--	---	---	---

(Signature)	(Date)
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.314 Loss of DC/audio signal

X	X	X	X		X	X	X
---	---	---	---	--	---	---	---

(Signature)	(Date)
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.315 Loss of transmitters

X	X	X	X		X	X	X
---	---	---	---	--	---	---	---

(Signature)	(Date)
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Completion of .3 area comprises 5% of watchstation.

5314.4 EMERGENCIES

For the emergency conditions listed below:

- What indications and alarms are received?
- What immediate action is required?
- What are the probable causes?
- What operating limitations are imposed?
- What other emergencies or malfunctions may occur if immediate action is not taken?
- How does this emergency affect other operations/equipment/watchstations)?
- Perform or simulate the immediate action for this emergency condition.

.41 Fire

A	B	C	D	E	F	G
X	X	X	X	X	X	X

EMERGENCIES (CONT'D)

Flooding

A	B	C	D	E	F	G
X	X	X	X	X	X	X

(Signature) (Date)

Power surge

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Arcing in transmission system

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Loss of chilled water/air-conditioning

X	X		X	X	X	X
---	---	--	---	---	---	---

(Signature) (Date)

Loss of antennas

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Electrical shock

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Completion of .4 area comprises 5% of watchstation.

WATCHES

Stand 5 satisfactory watches under qualified supervision.

SIGNATURE _____

DATE _____

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 4 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5106, 5110, 5117, 5118, 5121, 5126 (25% of watchstation)

Systems: 5215, 5216, 5224 thru 5226, 5231, 5237, 5238, 5242, 5251 thru 5253, 5257 thru 5264 (50% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What control/coordination is required?
- D. What safety precautions must be observed?
- E. What parameters must be monitored?
- F. Perform this task.

	A	B	C	D	E	F
1 Tune transceivers (as directed by FACCON)	X	X	X	X	X	X

(Signature) (Date)

2 Patch and tune appropriate antenna coupler (as directed by FACCON)	X	X	X	X	X	X
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(Signature) (Date)

3 Patch required audio/DC lines	X	X	X	X	X	X
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(Signature) (Date)

4 Maintain required logs and files	X	X				X
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(Signature) (Date)

5 Maintain status board	X	X				X
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(Signature) (Date)

6 Report all abnormalities to watch/FACCON supervisor	X	X	X			X
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(Signature) (Date)

315.1 TASKS (CONT'D)

.17 Channelize transceiver/coupler

A	B	C	D	E	F
X	X	X	X	X	X

(Signature) (Date)

.18 Detect muting operation

X	X	X		X	X
---	---	---	--	---	---

(Signature) (Date)

.19 Operate under EMCON

X	X	X		X	X
---	---	---	--	---	---

(Signature) (Date)

.110 Operate using tactical UHF relay pod

X	X	X	X	X	X
---	---	---	---	---	---

(Signature) (Date)

Completion of .1 area comprises 5% of watchstation.

315.2 INFREQUENT TASKS

For the infrequent tasks listed below:

- What are the steps of this procedure?
- What are the reasons for each step?
- What control/coordination is required?
- What safety precautions must be observed?
- What parameters must be monitored?
- What conditions require this infrequent task?
- Perform or simulate this task.

.21 Operate under HERO conditions

(Signature) (Date)

.22 Operate under RADHAZ conditions

(Signature) (Date)

.23 Operate under total loss of FACCON

(Signature) (Date)

Completion of .2 area comprises 5% of watchstation.

ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. What emergencies or malfunctions may occur if immediate action is not taken?
- F. How does this condition affect other operations/equipment watchstations?
- G. What followup action is required?
- H. Perform or simulate the corrective/immediate action for this abnormal condition.

	A	B	C	D	E	F	G	H
1 Loss of transmitter/receiver	X	X	X	X		X	X	X

(Signature) _____ (Date) _____

2 Excessive equipment/ambient temperatures	X	X	X	X	X	X	X	X
--	---	---	---	---	---	---	---	---

(Signature) _____ (Date) _____

3 Improper signal levels	X	X	X		X	X		X
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(Signature) _____ (Date) _____

4 Improper patching	X	X	X		X	X		X
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(Signature) _____ (Date) _____

5 Loss of primary internal communications	X	X	X	X		X	X	X
---	---	---	---	---	--	---	---	---

(Signature) _____ (Date) _____

6 Power fluctuations (60-/400-Hz)	X	X	X	X	X	X		X
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(Signature) _____ (Date) _____

7 Improper frequency separation	X	X	X	X	X	X		X
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(Signature) _____ (Date) _____

8 Loss of couplers/matrix	X	X	X	X	X	X	X	X
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(Signature) _____ (Date) _____

5315.3 ABNORMAL CONDITIONS (CONT'D)

A	B	C	D	E	F	G	H
X	X	X	X	X	X	X	X

.39 Loss of 400-Hz power

(Signature)	(Date)
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.310 Loss of 60-Hz power

X	X	X	X	X	X	X	X
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(Signature)	(Date)
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.311 Blown fuses

X	X	X	X		X	X	X
---	---	---	---	--	---	---	---

(Signature)	(Date)
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.312 Open RF patch cord

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature)	(Date)
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.313 Loss of RF signal

X	X	X	X		X	X	X
---	---	---	---	--	---	---	---

(Signature)	(Date)
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.314 Loss of DC/audio signal

X	X	X	X		X	X	X
---	---	---	---	--	---	---	---

(Signature)	(Date)
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Completion of .3 area comprises 5% of watchstation.

5315.4 EMERGENCIES

For the emergency conditions listed below:

- What indications and alarms are received?
- What immediate action is required?
- What are the probable causes?
- What operating limitations are imposed?
- What other emergencies or malfunctions may occur if immediate action is not taken?
- How does this emergency affect other operations/equipment/watchstations?
- Perform or simulate the immediate action for this emergency condition.

.41 Fire

A	B	C	D	E	F	G
X	X	X	X	X	X	X

(Signature)	(Date)
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EMERGENCIES (CONT'D)

Flooding

A	B	C	D	E	F	G
X	X	X	X	X	X	X

(Signature) (Date)

Power surge

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Arcing in transmission system

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Loss of chilled water/air-conditioning

X	X		X	X	X	X
---	---	--	---	---	---	---

(Signature) (Date)

Loss of antennas

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Electrical shock

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Completion of .4 area comprises 5% of watchstation.

WATCHES

Stand 5 satisfactory watches under qualified supervision.

SIGNATURE _____ DATE _____

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 12 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5105, 5108, 5112, 5113, 5123, 5126
(25% of watchstation)

Systems: 5201, 5202, 5219 thru 5223, 5240, 5241, 5246, 5248, 5251,
5252, 5255, 5256 (55% of watchstations)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What parameters must be monitored?
- D. What safety precautions must be observed?
- E. Perform this task.

Determine area broadcast to be copied	A	B	C	D	E
	X				X

(Signature) (Date)

Determine stations keying area broadcast	X				X
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(Signature) (Date)

Determine frequencies keyed by each station	X				X
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(Signature) (Date)

Select optimum operating frequency using propagation information	X	X	X	X	
---	---	---	---	---	--

(Signature) (Date)

Select equipment to be used	X	X		X	X
-----------------------------	---	---	--	---	---

(Signature) (Date)

Energize system components	X	X	X	X	X
----------------------------	---	---	---	---	---

(Signature) (Date)

5316.1 TASKS (CONT'D)

.17 Interface system by making required patches

A	B	C	D	E
X	X	X	X	X

(Signature)	(Date)
-------------	--------

.18 Tune and adjust system components for optimum performance

X	X	X	X	X
---	---	---	---	---

(Signature)	(Date)
-------------	--------

.19 Maintain circuit quality control

X	X	X	X	X
---	---	---	---	---

(Signature)	(Date)
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.110 Operate in diversity mode

X	X	X	X	X
---	---	---	---	---

(Signature)	(Date)
-------------	--------

Completion of .1 area comprises 5% of watchstation.

5316.2 INFREQUENT TASKS - None to be discussed.5316.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Adverse atmospheric conditions

(Signature)	(Date)
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.32 Variations in primary power

(Signature)	(Date)
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.33 Abnormal keying from transmitting station

(Signature)	(Date)
-------------	--------

3 ABNORMAL CONDITIONS (CONT'D)

34 Receive signals keyed at different transmitting stations

(Signature) (Date)

35 Improper patching audio/DC

(Signature) (Date)

36 Blown fuses

(Signature) (Date)

37 Loss of primary power

(Signature) (Date)

38 Loss of signal

(Signature) (Date)

39 Loss of keying from transmitting station

(Signature) (Date)

310 Equipment malfunction

(Signature) (Date)

311 Open patch cord

(Signature) (Date)

Completion of .3 area comprises 10% of watchstation.

4 EMERGENCIES - None to be discussed.

SIGNATURE

DATE

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 8 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5105, 5108, 5112, 5113 thru 5116, 5123, 5126
(20% of watchstation)

Systems: 5201, 5203, 5215 thru 5219, 5226, 5239 thru 5241, 5249,
5251, 5252, 5255, 5256, 5258 (50% of watchstation)

5317.1 TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What parameters must be monitored?
- D. What safety precautions must be observed?
- E. What are the sources of information?
- F. Perform this task.

		<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>
.11	Determine area broadcast to be copied	X				X	X

(Signature) _____ (Date) _____

.12	Determine channels to be copied		X			X	X
-----	---------------------------------	--	---	--	--	---	---

(Signature) _____ (Date) _____

.13	Determine stations keying broadcast		X			X	X
-----	-------------------------------------	--	---	--	--	---	---

(Signature) _____ (Date) _____

.14	Determine frequencies keyed at each station (LF/MF/HF/UHF)		X			X	X
-----	---	--	---	--	--	---	---

(Signature) _____ (Date) _____

.15	Select operating frequency using propagation information (LF/MF/HF/UHF)		X	X	X	X	X
-----	--	--	---	---	---	---	---

(Signature) _____ (Date) _____

.16	Select antennas/antenna coupler/antenna filter (LF/MF/HF/UHF)		X	X		X	X
-----	--	--	---	---	--	---	---

(Signature) _____ (Date) _____

17.1 TASKS (CONT'D)

		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>A</td><td>B</td><td>C</td><td>D</td><td>E</td><td>F</td> </tr> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> </table>	A	B	C	D	E	F	X	X	X	X	X	X
A	B	C	D	E	F									
X	X	X	X	X	X									

.17 Select and tune broadcast receivers (LF/MF/HF/UHF)

(Signature) (Date)

.18 Make all audio patches

		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> </table>	X	X	X	X	X	X
X	X	X	X	X	X			

(Signature) (Date)

.19 Make all DC patches

		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> </table>	X	X	X	X	X	X
X	X	X	X	X	X			

(Signature) (Date)

.110 Set up terminal equipment for operation

		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> </table>	X	X	X	X	X	X
X	X	X	X	X	X			

(Signature) (Date)

.111 Maintain circuit quality control

		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> </table>	X	X	X	X	X	X
X	X	X	X	X	X			

(Signature) (Date)

Completion of .1 area comprises 5% of watchstation.

17.2 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?

B. Perform or simulate this task.

.21 Activate additional broadcast channels

(Signature) (Date)

.22 Shift broadcast areas

(Signature) (Date)

Completion of .2 area comprises 5% of watchstation.

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

Adverse atmospheric conditions

(Signature) (Date)

Primary power variations

(Signature) (Date)

Abnormal keying from broadcast area keying station

(Signature) (Date)

Improper patching/audio/DC

(Signature) (Date)

Blown fuses

(Signature) (Date)

Loss of primary power

(Signature) (Date)

Loss of signal

(Signature) (Date)

Loss of keying from keying station

(Signature) (Date)

Equipment malfunctions

(Signature) (Date)

5317.3 ABNORMAL CONDITIONS (CONT'D)

.310 Open patch cord

(Signature) (Date)

Completion of .3 area comprises 15% of watchstation.

5317.4 EMERGENCIES - None to be discussed.

5317.5 WATCHES

Stand 3 satisfactory watches under qualified supervision.

SIGNATURE _____ DATE _____

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 8 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5105, 5109, 5112, 5113, 5114, 5117, 5123,
5126 (20% of watchstation)

Systems: 5201, 5205 thru 5208, 5215, 5216, 5222, 5223, 5226 thru 5233,
5240 thru 5248, 5251 thru 5256, 5258 thru 5260, 5262
(50% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What communications must be established?
- D. What parameters must be monitored?
- E. What safety precautions must be observed?
- F. What are the sources of information?
- G. Perform this task.

	A	B	C	D	E	F	G
1 Determine ships and/or station to be terminated	X	X	X			X	X
(Signature) _____ (Date) _____							
2 Determine frequencies to be used		X	X	X		X	X
(Signature) _____ (Date) _____							
3 Select equipment to be used		X	X	X			X
(Signature) _____ (Date) _____							
4 Energize system components		X	X	X	X	X	X
(Signature) _____ (Date) _____							
5 Interface system by making required patches		X	X	X	X	X	X
(Signature) _____ (Date) _____							
6 Tune and adjust system components for optimum performance		X	X	X	X	X	X
(Signature) _____ (Date) _____							

5318.1 TASKS (CONT'D)

A	B	C	D	E	F	G
X	X	X	X	X	X	X

- .17 Maintain circuit quality control

(Signature) (Date)

Completion of .1 area comprises 5% of watchstation.

5318.2 INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What communications must be established?
- D. What parameters must be monitored?
- E. What safety precautions must be observed?
- F. What conditions require this infrequent task?
- G. Perform or simulate this task.

- .21 Operate types C and G systems in semiduplex mode

(Signature) (Date)

Completion of .2 area comprises 5% of watchstation.

5318.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

- .31 Adverse atmospheric conditions

(Signature) (Date)

- .32 Overheating equipment

(Signature) (Date)

- .33 Fluctuation of primary power

(Signature) (Date)

Signature) _____ (Date)

loss of signal

Signature) _____ (Date)

equipment malfunction

Signature) _____ (Date)

open patch cord

Signature) _____ (Date)

Completion of .3 area comprises 15% of watchstation.

EMERGENCIES - None to be discussed.

WATCHES

stand 3 satisfactory watches under qualified supervision.

SIGNATURE _____ DATE

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 4 weeks

Before starting your assigned tasks, complete the following items:

PQS Qualifications: NAVEDTRA 43307A

Fundamentals: 5101, 5105, 5109, 5110, 5112, 5113, 5114, 5117, 5119,
 5123, 5126 (20% of watchstation)

Systems: 5210, 5212, 5215, 5223, 5227 thru 5230, 5232, 5233, 5240,
 5241, 5243, 5244, 5251, 5253, 5256 thru 5260, 5262, 5266
 (60% of watchstation)

TASKS

For the tasks listed below:

- . What are the steps of this procedure?
- . What control/coordination is required?
- . What communications must be established?
- . What parameters must be monitored?
- . What safety precautions must be observed?
- . Perform this task.

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>
Determine communications net subscribers and NECOS	X					X

 Signature) (Date)

Determine frequency to be used	X					X
--------------------------------	---	--	--	--	--	---

 Signature) (Date)

Select equipment to be used	X	X	X			X
-----------------------------	---	---	---	--	--	---

 Signature) (Date)

Energize system components	X	X	X	X	X	X
----------------------------	---	---	---	---	---	---

 Signature) (Date)

Watch receiver and transmitter	X	X	X	X	X	X
--------------------------------	---	---	---	---	---	---

 Signature) (Date)

5319.1 TASKS (CONT'D)A B C D E

- .16 Tune and adjust system components for optimum performance

X X X X X

(Signature) (Date)

- .17 Transmit and receive intelligence locally

X X X X X

(Signature) (Date)

- .18 Interface system for remote operation

X X X X X

(Signature) (Date)

- .19 Maintain circuit quality control

X X X X X

(Signature) (Date)

Completion of .1 area comprises 5% of watchstation.

5319.2 INFREQUENT TASKS - None to be discussed.5319.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

- .31 Overheating equipment

(Signature) (Date)

- .32 Fluctuation of primary power

(Signature) (Date)

- .33 Adverse atmospheric conditions

(Signature) (Date)

ABNORMAL CONDITIONS (CONT'D)

Blown fuse

(Signature) (Date)

Loss of primary power

(Signature) (Date)

Equipment malfunction

(Signature) (Date)

Completion of .3 area comprises 10% of watchstation.

EMERGENCIES - None to be discussed.

WATCHES

Stand 3 satisfactory watches under qualified supervision.

SIGNATURE _____ DATE _____

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 4 weeks

Before starting your assigned tasks, complete the following items:

PQS Qualifications: NAVEDTRA 43307A

Fundamentals: 5101, 5105, 5109, 5110, 5112, 5113, 5114, 5117,
5119, 5123, 5126 (20% of watchstation)

Systems: 5209, 5211, 5215, 5226, 5231, 5235, 5236, 5240, 5251, 5253,
5256 thru 5260, 5262 (60% of watchstation)

1 TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What communications must be established?
- D. What parameters must be monitored?
- E. What safety precautions must be observed?
- F. Perform this task.

.11	Determine communications net subscribers and NECOS	A	B	C	D	E	F
		X	X	X			X

(Signature) (Date)

.12	Determine frequency to be used	X	X	X			X
-----	--------------------------------	---	---	---	--	--	---

(Signature) (Date)

.13	Select equipment to be used	X	X	X			X
-----	-----------------------------	---	---	---	--	--	---

(Signature) (Date)

.14	Energize system components	X	X	X	X	X	X
-----	----------------------------	---	---	---	---	---	---

(Signature) (Date)

.15	Interface system by making required patches	X	X	X	X	X	X
-----	---	---	---	---	---	---	---

(Signature) (Date)

.16	Tune and adjust system components for optimum performance	X	X	X	X	X	X
-----	---	---	---	---	---	---	---

(Signature) (Date)

5320.1 TASKS (CONT'D)

A	B	C	D	E	F
X	X	X	X	X	X

- .17 Transmit and receive intelligence locally

(Signature) (Date)

- .18 Interface system for remote operation

X	X	X	X	X	X
---	---	---	---	---	---

(Signature) (Date)

- .19 Maintain circuit quality control

X	X	X	X	X	X
---	---	---	---	---	---

(Signature) (Date)

Completion of .1 area comprises 5% of watchstation.

5320.2 INFREQUENT TASKS - None to be discussed.

5320.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

- .31 Overheating equipment

(Signature) (Date)

- .32 Fluctuation of primary power

(Signature) (Date)

- .33 Blown fuse

(Signature) (Date)

- .34 Loss of primary power

(Signature) (Date)

5320.3 ABNORMAL CONDITIONS (CONT'D)

.35 Equipment malfunction

(Signature) (Date)

Completion of .3 area comprises 10% of watchstation.

5320.4 EMERGENCIES - None to be discussed.

5320.5 WATCHES

Stand 3 satisfactory watches under qualified supervision.

SIGNATURE _____ DATE _____

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 24 weeks

Before starting your assigned tasks, complete the following items:

Schools: IMCO RM-2304 NEC

Fundamentals: 5101, 5102, 5104 thru 5106, 5109, 5110, 5117 thru 5119,
5123, 5126 (30% of watchstation)

Systems: 5214, 5222, 5223, 5258 thru 6260, 5262, 5264
(30% of watchstation)

TASKS

For the tasks listed below:

- What are the steps of this procedure?
- What are the reasons for each step?
- What control/coordination is required?
- Perform this task.

Establish and maintain subscriber list

A	B	C	D
X	X	X	X

(Signature) (Date)

Determine frequency to be used

X	X	X	X
---	---	---	---

(Signature) (Date)

Tune and adjust receiver and CW key

X	X	X	
---	---	---	--

(Signature) (Date)

Set up and maintain logs

X	X	X	
---	---	---	--

(Signature) (Date)

Check into net

X	X	X	
---	---	---	--

(Signature) (Date)

Challenge and reply authentication

X	X	X	
---	---	---	--

(Signature) (Date)

.17 Transmit message

(Signature)	(Date)
-------------	--------

.18 Answer request for retransmission

X X X

(Signature)	(Date)
-------------	--------

.19 Ensure receipt by appropriate stations

X X X

(Signature)	(Date)
-------------	--------

.110 Process and deliver outgoing message to next contact point

X X X X

(Signature)	(Date)
-------------	--------

.111 Receive message

X X X

(Signature)	(Date)
-------------	--------

.112 Request retransmission

X X X

(Signature)	(Date)
-------------	--------

.113 Acknowledge receipt of message

X X X

(Signature)	(Date)
-------------	--------

.114 Process and deliver incoming message to next contact point

X X X X

(Signature)	(Date)
-------------	--------

.115 Maintain proper circuit discipline

X X X

(Signature)	(Date)
-------------	--------

.116 Act as net control station (NECOS)

X X X

(Signature)	(Date)
-------------	--------

5321.2 INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What control/coordination is required?
- D. What communications must be established?
- E. What conditions require this infrequent task?
- F. Perform or simulate this task.

A	B	C	D	E	F
X	X	X	X	X	X

- .21 Impose radio silence as directed

(Signature) (Date)

- .22 Operate CW tactical circuit

X	X	X	X	X
---	---	---	---	---

(Signature) (Date)

- .23 Handle high-precedence traffic

X	X	X	X
---	---	---	---

(Signature) (Date)

Completion of .2 area comprises 5% of watchstation.

5321.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for the abnormal condition.

- .31 Improper circuit discipline

(Signature) (Date)

- .32 Failure to maintain logs

(Signature) (Date)

- .33 Improper use of operating signals

(Signature) (Date)

3 ABNORMAL CONDITIONS (CONT'D)

34 Failure to promptly receipt for messages

(Signature) _____ (Date) _____

35 Message backlog

(Signature) _____ (Date) _____

36 Transmitting message out of precedence order

(Signature) _____ (Date) _____

37 Fluctuations of primary power

(Signature) _____ (Date) _____

38 Unauthorized personnel tampering with equipment

(Signature) _____ (Date) _____

39 Equipment malfunction

(Signature) _____ (Date) _____

310 Adverse atmospheric conditions

(Signature) _____ (Date) _____

311 Jamming

(Signature) _____ (Date) _____

12 Imitative deception

(Signature) _____ (Date) _____

13 Interference

(Signature) _____ (Date) _____

5321.3 ABNORMAL CONDITIONS (CONT'D)

.314 Improper authentication procedures

(Signature) _____ (Date) _____

Completion of .3 area comprises 5% of watchstation.

5321.4 EMERGENCIES - None to be discussed.

5321.5 WATCHES

Stand 3 satisfactory watches under qualified supervision.

SIGNATURE _____ DATE _____

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 4 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5105, 5109, 5112, 5113, 5117 thru 5119, 5123, 5126 (20% of watchstation)

Systems: 5214, 5219 thru 5223, 5227 thru 5230, 5232, 5233, 5240, 5241, 5243, 5244, 5251, 5253, 5256, 5257, 5259, 5260, 5262, 5264, 5265 (60% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What communications must be established?
- D. What parameters must be monitored?
- E. What safety precautions must be observed?
- F. Perform this task.

	A	B	C	D	E	F
Determine ships and/or stations to be terminated	X					X

(Signature) (Date)

Determine frequency to be used	X					X
--------------------------------	---	--	--	--	--	---

(Signature) (Date)

Select equipment to be used	X					X
-----------------------------	---	--	--	--	--	---

(Signature) (Date)

Energize system components	X	X	X	X	X	X
----------------------------	---	---	---	---	---	---

(Signature) (Date)

Interface system by making required patches	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Tune and adjust system components for optimum performance	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Completion of .1 area comprises 5% of watchstation.

5322.2 INFREQUENT TASKS - None to be discussed.

5322.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Adverse atmospheric conditions

(Signature) (Date)

.32 Overheating equipment

(Signature) (Date)

.33 Fluctuations of primary power

(Signature) (Date)

.34 Jamming

(Signature) (Date)

.35 Interference

(Signature) (Date)

.36 Blown fuse

(Signature) (Date)

.37 Loss of primary power

(Signature) (Date)

.38 Equipment malfunction

(Signature) (Date)

Completion of .3 area comprises 10% of watchstation.

EMERGENCIES - None to be discussed.

WATCHES

stand 3 satisfactory watches under qualified supervision.

SIGNATURE

DATE

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 12 weeks

Before starting your assigned tasks, complete the following items:

Schools: Communication Quality Monitoring System (CQMS)

Fundamentals: 5101, 5105, 5108, 5109, 5112, 5113, 5117, 5121, 5123
thru 5126 (25% of watchstation)

Systems: 5201 thru 5214, 5219 thru 5234, 5236 thru 5264
(60% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What parameters must be monitored?
- C. Perform this task.

Energize equipment

(Signature) (Date)

Set up for and conduct frequency measurements

(Signature) (Date)

Set up for and conduct FSK measurements

(Signature) (Date)

Set up for and conduct spectrum analysis

(Signature) (Date)

Set up for and conduct digital distortion measurements

(Signature) (Date)

Set up for and conduct audio distortion measurements

(Signature) (Date)

De-energize equipment

(Signature) (Date)

5323.2 INFREQUENT TASKS - None to be discussed.

5323.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Loss of external frequency standard

(Signature) (Date)

Completion of .3 area comprises 5% of watchstation.

5323.4 EMERGENCIES - None to be discussed.

5323.5 WATCHES - None.

Estimated completion time: 6 weeks

Before starting your assigned tasks, complete the following items:

Fundamentals: 5101, 5109, 5112, 5113, 5114, 5117, 5121, 5123,
 5126 (25% of watchstation)

Systems: 5201, 5213, 5215, 5216, 5223, 5226 thru 5234, 5240 thru 5244,
 5249, 5251 thru 5253, 5255, 5256, 5263 (35% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What communications must be established?
- C. What safety precautions must be observed?
- D. What parameters must be monitored?
- E. Perform this task.

Identify NAVCOMMSTA to be terminate

A B C D E

 (Signature) (Date)

Obtain operating frequencies

 (Signature) (Date)

Select proper transmitter

X X X X

 (Signature) (Date)

Coordinate tuning transmitters with
 transmitter operator

X X X X X

 (Signature) (Date)

Ensure keys are on and patched on tone
 distribution patch panel

X X X

 (Signature) (Date)

Patch output of keyer to transmitter key line

X X X

 (Signature) (Date)

.17 Make all black DC send patches

(Signature)	(Date)
-------------	--------

.18 Set tone levels

X X X X

(Signature)	(Date)
-------------	--------

.19 Select and set up crypto equipment

X X X X

(Signature)	(Date)
-------------	--------

.110 Make all red DC send patches

X X X X X

(Signature)	(Date)
-------------	--------

.111 Patch remote crypto equipment

X X X X X

(Signature)	(Date)
-------------	--------

.112 Select an operating frequency

X X X X

(Signature)	(Date)
-------------	--------

.113 Select antenna/filter/coupler

X X X

(Signature)	(Date)
-------------	--------

.114 Select receiver

X X X

(Signature)	(Date)
-------------	--------

.115 Patch antenna group to receivers

X X X

(Signature)	(Date)
-------------	--------

.116 Tune antenna group to receivers

X X X X

(Signature)	(Date)
-------------	--------

.117 Make receive audio patches

X X X

(Signature)	(Date)
-------------	--------

TASKS (CONT'D)

Make black DC receive patches

A	B	C	D	E
X	X	X	X	X

(Signature) (Date)

Select and set up crypto equipment

X	X		X	X
---	---	--	---	---

(Signature) (Date)

Make red DC receive patches

X	X	X	X	X
---	---	---	---	---

(Signature) (Date)

Notify terminating NAVCOMMSTA of operating frequencies

X	X			X
---	---	--	--	---

(Signature) (Date)

Inform Watch Supervisor that system is

(Signature) (Date)

Maintain termination quality control

(Signature) (Date)

Completion of .1 area comprises 11

INFREQUENT TASKS

For the infrequent tasks listed below:

- . What are the steps of this procedure?
- . What control/coordination is required?
- . What communications must be established?
- . What conditions require this infrequent task?
- . Perform or simulate this task.

Operate during EMCON condition

(Signature) (Date)

Operate during HERO condition

(Signature) (Date)

(Signature) (Date)

Completion of .2 area comprises 10% of watchstation.

5324.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Adverse atmospheric conditions

(Signature) (Date)

.32 Excessive temperature variations

(Signature) (Date)

.33 Primary power variations

(Signature) (Date)

.34 Abnormal keying send/receive

(Signature) (Date)

.35 Diversity reception

(Signature) (Date)

.36 Improper patching/audio/DC

(Signature) (Date)

.37 Blown fuses

(Signature) (Date)

(Signature) (Date)

Loss of signals

(Signature) (Date)

0 Loss of keying

(Signature) (Date)

1 Equipment malfunctions

(Signature) (Date)

2 Open patch cord

(Signature) (Date)

3 Dirty electrical contacts

(Signature) (Date)

Completion of .3 area comprises 10% of watchstation.

EMERGENCIES - None to be discussed.

WATCHES

Stand 3 satisfactory watches under qualified supervision.

SIGNATURE _____ DATE _____

Completion of .5 area comprises 10% of watchstation.

Estimated completion time: 8 weeks

Before starting your assigned tasks, complete the following items:

PQS Qualifications: NAVEDTRA 43307A

Fundamentals: 5101, 5102, 5105, 5106, 5109, 5110, 5112 thru
5114, 5117, 5123, 5126 (20% of watchstation)

Systems: 5209, 5210, 5215, 5223, 5227 thru 5231, 5235, 5240, 5241,
5243, 5244, 5251, 5253, 5256, 5266 (60% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What communications must be established?
- D. What safety precautions must be observed?
- E. What parameters must be monitored?
- F. Perform this task.

- | | A | B | C | D | E | F |
|--|---|---|---|--------|---|---|
| 11 Determine radio path | X | X | | | | X |
| <hr/> | | | | | | |
| (Signature) | | | | (Date) | | |
| 12 Select equipments to be used | | X | X | | | X |
| <hr/> | | | | | | |
| (Signature) | | | | (Date) | | |
| 13 Energize system components | | X | X | | X | X |
| <hr/> | | | | | | |
| (Signature) | | | | (Date) | | |
| 14 Interface system by making required patches | | X | X | | X | X |
| <hr/> | | | | | | |
| (Signature) | | | | (Date) | | |
| 15 Tune and adjust system components for optimum performance | | X | X | X | X | X |
| <hr/> | | | | | | |
| (Signature) | | | | (Date) | | |
| 16 Transmit and receive intelligence locally | | X | X | X | X | X |
| <hr/> | | | | | | |
| (Signature) | | | | (Date) | | |

5325.1 TASKS (CONT'D)

A	B	C	D	E	F
X	X		X	X	X

.17 Interface system for remote operation

(Signature) (Date)

.18 Maintain circuit quality control

X	X		X	X	X
---	---	--	---	---	---

(Signature) (Date)

Completion of .1 area comprises 5% of watchstation.

5325.2 INFREQUENT TASKS - None to be discussed.

5325.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Fluctuation of primary power

(Signature) (Date)

.32 Blown fuse

(Signature) (Date)

.33 Loss of primary power

(Signature) (Date)

.34 Equipment malfunction

(Signature) (Date)

Completion of .3 area comprises 10% of watchstation.

5325.4 EMERGENCIES - None to be discussed.

WATCHES

stand 3 satisfactory watches under qualified supervision.

SIGNATURE

DATE

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 12 weeks

Before starting your assigned tasks, complete the following items:

Schools: NAVMACS V2/V3

Fundamentals: 5101, 5102, 5104 thru 5106, 5108 thru 5110, 5114 thru
5117, 5123, 5126 (25% of watchstation)

Systems: 5201, 5203, 5215 thru 5218, 5251 thru 5253, 5255
(50% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What safety precautions must be observed?
- C. Perform this task.

	A	B	C
11 Energize all NAVMACS-associated equipment	X	X	X

(Signature) (Date)

12 Set up NAVMACS equipment for normal operations	X	X
---	---	---

(Signature) (Date)

13 Insert basic program into CPU using magnetic tape	X	X
--	---	---

(Signature) (Date)

14 Insert basic program into CPU using paper tape	X	X
---	---	---

(Signature) (Date)

15 Enter initialization startup commands	X	X
--	---	---

(Signature) (Date)

16 Insert CGL into CPU	X	X
------------------------	---	---

(Signature) (Date)

17 Retrieve CGL from CPU	X	X
--------------------------	---	---

(Signature) (Date)

	<u>(Signature)</u>	<u>(Date)</u>		
.19	Make additions to the CGL		X	X
	<u>(Signature)</u>	<u>(Date)</u>		
.110	Make deletions from the CGL		X	X
	<u>(Signature)</u>	<u>(Date)</u>		
.111	Transmit narrative message on CUDIXS link		X	X
	<u>(Signature)</u>	<u>(Date)</u>		
.112	Retrieve incoming broadcast message		X	X
	<u>(Signature)</u>	<u>(Date)</u>		
.113	Transmit OT0		X	X
	<u>(Signature)</u>	<u>(Date)</u>		
.114	Transmit NOM on V2 system		X	X
	<u>(Signature)</u>	<u>(Date)</u>		
.115	Retrieve CUDIXS transmit queue report (backlog)		X	X
	<u>(Signature)</u>	<u>(Date)</u>		
.116	Change automatic repeat request limit (ARQ)		X	X
	<u>(Signature)</u>	<u>(Date)</u>		
.117	Change rerun mode (RRM)		X	X
	<u>(Signature)</u>	<u>(Date)</u>		
.118	Change address screening threshold (QRK)		X	X
	<u>(Signature)</u>	<u>(Date)</u>		

TASKS (CONT'D)

	<u>A</u>	<u>B</u>	<u>C</u>
Retrieve computer clock time	X		X
_____ (Signature) _____ (Date)			
Change computer clock time	X		X
_____ (Signature) _____ (Date)			
Change subscriber ID (SID)	X		X
_____ (Signature) _____ (Date)			
Retrieve system parameter page (SPP) (all parameters)	X		X
_____ (Signature) _____ (Date)			
Retrieve SPD (device portion of SPP) on V2 system	X		X
_____ (Signature) _____ (Date)			
Retrieve SPB (broadcast portion of SPP) on V2 system	X		X
_____ (Signature) _____ (Date)			
Retrieve SPL (link portion of SPP) on V2 system	X		X
_____ (Signature) _____ (Date)			
Retrieve automatic repeat query (ARQ) limit	X		X
_____ (Signature) _____ (Date)			
Retrieve address screening threshold (QRK)	X		X
_____ (Signature) _____ (Date)			
Retrieve rerun mode (RRM)	X		X
_____ (Signature) _____ (Date)			
Retrieve subscriber ID (SID)	X		X
_____ (Signature) _____ (Date)			

26.1 TASKS (CONT'D)

A	B	C
X	X	X

.130 CUP the broadcast

(Signature) (Date)

X X

.131 CUP the CUDIXS link

(Signature) (Date)

X X

.132 Request WML

(Signature) (Date)

.133 Prepare duplicate of paper tape message using RD-397

X X

(Signature) (Date)

.134 Change TT-624 paper

X X X

(Signature) (Date)

.135 Change TT-624 ribbon

X X X

(Signature) (Date)

.136 Change RD-397 paper tape

X X X

(Signature) (Date)

Completion of .1 area comprises 10% of watchstation.

5326.2 INFREQUENT TASKS

For the infrequent tasks listed below:

- What are the steps of this procedure?
- What conditions require this infrequent task?
- Perform or simulate this task.

.21 Operate broadcast manually

(Signature) (Date)

.22 Use TT-187

(Signature) (Date)

INFREQUENT TASKS (CONT'D)

Use TT-192

(Signature) (Date)

Set EMCON

(Signature) (Date)

Completion of .2 area comprises 5% of watchstation.

ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

Paper jams in TT-624

(Signature) (Date)

Ribbon not advancing in TT-624

(Signature) (Date)

Loss of command position

(Signature) (Date)

Activation of NAVMACS fall back mode

(Signature) (Date)

Completion of .3 area comprises 5% of watchstation.

EMERGENCIES - None to be discussed.

5326.5 WATCHES

Stand 3 satisfactory watches under qualified supervision.

SIGNATURE

DATE

Completion of .5 area comprises 5% of watchstation.

Estimated completion time: 36 weeks

Before starting your assigned tasks, complete the following items:

Schools: Communications System Technician (A-202-0013)

PQS Qualifications: NAVEDTRA 43355-5AQ13, NAVEDTRA 43355-5AQ14,
NAVEDTRA 43355-5AQ15, NAVEDTRA 43355-5AQ16,
NAVEDTRA 43355-5AQ17, NAVEDTRA 43355-5AQ18,
NAVEDTRA 43355-5AQ19, NAVEDTRA 43355-5AQ20,
NAVEDTRA 43355-5AQ22, NAVEDTRA 43355-5AQ23,
NAVEDTRA 43355-5AQ24, NAVEDTRA 43355-5AQ25,
NAVEDTRA 43355-5AQ26

Fundamentals: 5107, 5111, 5120, 5122 (25% of watchstation)

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What control/coordination is required?
- D. What communications must be observed?
- E. What safety precautions must be observed?
- F. What parameters must be observed?
- G. Perform this task.

Assume the watch

A	B	C	D	E	F	G
X	X	X		X		X

(Signature) (Date)

Verify and maintain status board/equipment boards X X X X

(Signature) (Date)

Initiate response procedures to fast reaction
messages X X X X X

(Signature) (Date)

Conduct daily crypto restarts and destruction X X X X X X

(Signature) (Date)

Make appropriate log entries X X X

(Signature) (Date)

5327.1 TASKS (CONT'D)

		<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>
.16	Inform FACCON supervisor of pertinent information/problems	X	X	X				X
	(Signature) _____ (Date) _____							
.17	Determine optimum operating frequency range using tactical frequency management (AN/TRQ-35(V)) system	X	X			X	X	X
	(Signature) _____ (Date) _____							
.18	Operate under EMCON	X	X	X	X		X	X
	(Signature) _____ (Date) _____							
.19	Operate using code 17 procedures	X	X	X	X	X	X	X
	(Signature) _____ (Date) _____							
.110	Operate using tactical UHF relay pod	X	X	X	X	X	X	X
	(Signature) _____ (Date) _____							
.111	Operate using DAMA	X	X	X	X	X	X	X
	(Signature) _____ (Date) _____							
.112	Activate the COMMLAN	X	X	X	X	X	X	X
	(Signature) _____ (Date) _____							
.113	Conduct circuit checks from remotes upon activation	X	X	X	X		X	X
	(Signature) _____ (Date) _____							

Completion of .1 area comprises 15% of watchstation.

INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What control/coordination is required?
- D. What communications must be established?
- E. What safety precautions must be observed?
- F. What parameters must be monitored?
- G. How are monitored parameters changed by this infrequent task?
- H. What conditions require this infrequent task?
- I. Perform or simulate this task.

A B C D E F G H I

Operate under HERO condition

X X X X X X X X

(Signature) _____ (Date) _____

Operate under RADHAZ

X X X X X X X X

(Signature) (Date)

Operate under limited range/low probability intercept conditions

X X X X X X X

(Signature) _____ (Date) _____

Set up UHF/HF relay

X X X X X X X X

(Signature) _____ (Date) _____

Set up submarine broadcast

X X X X X X X X

(Signature) _____ (Date) _____

Operate portable communications equipment

X X X X X X X X

(Signature) (Date)

Rekey broadcast

X X X X X X X X

(Signature) _____ (Date) _____

Operate under distress communication conditions

X X X X X X X X

(Signature) _____ (Date) _____

5327.2 INFREQUENT TASKS (CONT'D)

.29 Operate under guerrilla procedures

A	B	C	D	E	F	G	H
X	X	X	X	X	X	X	X

(Signature) _____ (Date) _____

.210 Operate a coastal harbor/high seas radiotelephone net

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) _____ (Date) _____

Completion of .2 area comprises 10% of watchstation.

5327.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. What emergencies or malfunctions may occur if immediate action is not taken?
- F. How does this condition affect other operations/equipment/watchstations?
- G. What followup action is required?
- H. Perform or simulate the corrective/immediate action for this abnormal condition.

.31 Partial/precautionary emergency destruction

A	B	C	D	E	F	G	H
X	X	X	X	X	X	X	X

(Signature) _____ (Date) _____

.32 Complete emergency destruction

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) _____ (Date) _____

.33 Signal fade conditions

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) _____ (Date) _____

.34 Loss of power

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) _____ (Date) _____

ABNORMAL CONDITIONS (CONT'D)

A	B	C	D	E	F	G	H
X	X	X	X	X	X	X	X

High distortion on black board

(Signature) (Date)

Intermodulation distribution/interference audio

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

Loss of HF circuits

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

Loss of UHF/VHF circuits

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

0 Loss of SATCOM

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

1 Loss of frequency standard

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

2 Loss of antenna system

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

3 Loss of DC power supply

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

4 Excessive equipment/ambient temperature

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

5 Emergency patching of single audio system

X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---

(Signature) (Date)

Completion of .3 area comprises 10% of watchstation.

5327.4 EMERGENCIES

For the emergency conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. What other emergencies or malfunctions may occur if immediate action is not taken?
- F. How does this emergency affect other operations/equipment/watchstation?
- G. Perform or simulate the immediate action for this emergency condition.

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>
.41 Fire	X	X	X	X	X	X	X
<div style="display: flex; justify-content: space-between; margin-top: 10px;"> _____ (Signature) _____ (Date) </div>							
.42 Flooding	X	X	X	X	X	X	X
<div style="display: flex; justify-content: space-between; margin-top: 10px;"> _____ (Signature) _____ (Date) </div>							
.43 Power surge	X	X	X	X	X	X	X
<div style="display: flex; justify-content: space-between; margin-top: 10px;"> _____ (Signature) _____ (Date) </div>							
.44 Arcing in equipment	X	X	X	X	X	X	X
<div style="display: flex; justify-content: space-between; margin-top: 10px;"> _____ (Signature) _____ (Date) </div>							
.45 Loss of chilled water/air-conditioning	X	X		X	X	X	X
<div style="display: flex; justify-content: space-between; margin-top: 10px;"> _____ (Signature) _____ (Date) </div>							
.46 Electrical shock	X	X	X	X	X	X	X
<div style="display: flex; justify-content: space-between; margin-top: 10px;"> _____ (Signature) _____ (Date) </div>							

Completion of .4 area comprises 10% of watchstation.

5327.5 WATCHES

Stand 15 satisfactory watches under qualified supervision.

SIGNATURE

DATE _____

Completion of .5 area comprises 30% of watchstation.

Estimated completion time: 36 weeks

Before starting your assigned tasks, complete the following items:

Schools: Communications System Technician (A-202-0013)

PQS Qualifications: NAVEDTRA 43355-5A27

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What control/coordination is required?
- D. What safety precautions must be observed?
- E. What security precautions must be observed?
- F. Perform this task.

	A B C D E F
Construct and implement the COMPLAN	X X X X X

(Signature) (Date)

Inventory watch-to-watch publications/CMS material	X X X X X
--	-----------

(Signature) (Date)

Ensure watch is familiar with COMPLAN, OPORDs, EMCON/HERO/RADHAZ restrictions, communications information bulletins (CIBs) and emergency destruction plan	X X X X X
---	-----------

(Signature) (Date)

Ensure status/equipment boards are up-to-date and correct	X X X X X
---	-----------

(Signature) (Date)

Conduct FACCON communications training	X X X X X X
--	-------------

(Signature) (Date)

Ensure appropriate action is taken on emergency action/fast reaction messages	X X X X X
---	-----------

(Signature) (Date)

5328.1 TASKS (CONT'D)

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>
.17 Instruct and monitor physical and transmission security of FACCON watchstations	X	X	X		X	X
<u>(Signature)</u> _____ <u>(Date)</u> _____						
.18 Prepare associated communications reports/requests	X	X	X		X	X
<u>(Signature)</u> _____ <u>(Date)</u> _____						
.19 Maintain liaison with all shipboard communication subscribers	X	X	X			X
<u>(Signature)</u> _____ <u>(Date)</u> _____						
.110 Record equipment trouble reports	X	X	X		X	X
<u>(Signature)</u> _____ <u>(Date)</u> _____						
.111 Supervise daily crypto restarts/destruction	X	X	X	X	X	X
<u>(Signature)</u> _____ <u>(Date)</u> _____						
.112 Ensure quality control monitoring is carried out	X	X	X			X
<u>(Signature)</u> _____ <u>(Date)</u> _____						
.113 Supervise use of DAMA	X	X	X		X	X
<u>(Signature)</u> _____ <u>(Date)</u> _____						
.114 Supervise use of tactical UHF relay pod	X	X	X		X	X
<u>(Signature)</u> _____ <u>(Date)</u> _____						
.115 Supervise use of Code 17 procedures	X	X	X		X	X
<u>(Signature)</u> _____ <u>(Date)</u> _____						

.1 TASKS (CONT'D)

.116 Supervise circuit checks upon circuit activation

A	B	C	D	E	F
X	X	X		X	X

(Signature) (Date)

Completion of .1 area comprises 40% of watchstation.

.2 INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What are the reasons for each step?
- C. What control/coordination is required?
- D. What communications must be established?
- E. What conditions require this infrequent task?
- F. What security precautions must be observed?
- G. Perform or simulate this task.

.21 Supervise FACCON during distress communication conditions

A	B	C	D	E	F	G
X	X	X	X	X		X

(Signature) (Date)

.22 Supervise FACCON during RADHAZ conditions

X	X	X	X	X		X
---	---	---	---	---	--	---

(Signature) (Date)

.23 Supervise FACCON using LRI/LPI

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

.24 Supervise coastal harbor/high seas radiotelephone net

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

.25 Supervise guerrilla procedures

X	X	X	X	X	X	X
---	---	---	---	---	---	---

(Signature) (Date)

Completion of .2 area comprises 20% of watchstation.

.3 ABNORMAL CONDITIONS - None to be discussed.

.4 EMERGENCIES - None to be discussed.

5328.5 WATCHES

Stand 15 satisfactory watches under qualified supervision.

SIGNATURE

DATE

Completion of .5 area comprises 40% of watchstation.

Estimated completion time: 26 weeks

Before starting your assigned tasks, complete the following items:

PQS Qualifications: NAVEDTRA 43355-5AQ1, NAVEDTRA 43355-5AQ2,
NAVEDTRA 43355-5AQ3, NAVEDTRA 43355-5AQ4,
NAVEDTRA 43355-5AQ5, NAVEDTRA 43355-5AQ6,
NAVEDTRA 43355-5AQ7, NAVEDTRA 43355-5AQ8,
NAVEDTRA 43355-5AQ9, NAVEDTRA 43355-5AQ10,
NAVEDTRA 43355-5AQ11, NAVEDTRA 43355-5AQ12,
NAVEDTRA 43355-5AQ21, NAVEDTRA 43355-5AQ28

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What safety precautions must be observed?
- C. Perform this task.

A B C

Assign personnel to cover all watchstations on
your watch

X X X

(Signature) (Date)

Maintain watch-to-watch publication inventory

X X X

(Signature) (Date)

Maintain status boards

X X X

(Signature) (Date)

Effectively use communications plans, OPORDs,
CIBs and local SOP

X X X

(Signature) (Date)

Ensure that watch is familiar with the use and
function of emergency action plan

X X X

(Signature) (Date)

Execute shipboard communications training

X X X

(Signature) (Date)

		<u>A</u>	<u>B</u>	<u>C</u>
.17	Initiate procedures to eliminate backlog conditions at all watchstations		X	X X
	(Signature) _____ (Date) _____			
.18	Handle emergency action/special category messages		X	X X
	(Signature) _____ (Date) _____			
.19	Monitor security of all watchstations		X	X X
	(Signature) _____ (Date) _____			
.110	Complete required communications reports		X	X X
	(Signature) _____ (Date) _____			
.111	Coordinate circuit restoration		X	X X
	(Signature) _____ (Date) _____			
.112	Maintain Watch Supervisor logs		X	X X
	(Signature) _____ (Date) _____			
.113	Report abnormalities to appropriate authority		X	X X
	(Signature) _____ (Date) _____			
.114	Assist in drafting broadcast shifts/termination requests		X	X X
	(Signature) _____ (Date) _____			
.115	Supervise during General Quarters		X	X X
	(Signature) _____ (Date) _____			
.116	Prepare broadcast screen request		X	X
	(Signature) _____ (Date) _____			

TASKS (CONT'D)

7 Maintain local guard list

A	B	C
X		X

(Signature) (Date)

Completion of .1 area comprises 30% of watchstation.

INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What communications must be established?
- D. What safety precautions must be observed?
- E. What conditions require this infrequent task?
- F. Perform or simulate this task.

Supervise when Pigeon Post procedures are in effect

(Signature) (Date)

Supervise setup and use distress communications

(Signature) (Date)

Supervise during minimize

(Signature) (Date)

Supervise during EMCON conditions

(Signature) (Date)

Supervise during HERO conditions

(Signature) (Date)

Supervise during special circuit communications

(Signature) (Date)

Supervise transmission/message authentication

(Signature) (Date)

5329.2 INFREQUENT TASKS (CONT'D)

- .28 Simulate implementing emergency destruction

(Signature) (Date)

- .29 Supervise setup of UHF/HF relay

(Signature) (Date)

Completion of .2 area comprises 25% of watchstation.

5329.3 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this condition affect other operations/equipment/watchstations?
- F. Perform or simulate the corrective/immediate action for this abnormal condition.

- .31 Loss of publication/OPORD/COMPLAN/CMS material

(Signature) (Date)

- .32 Improper watch-to-watch turnover

(Signature) (Date)

- .33 Improperly manned watchstations

(Signature) (Date)

- .34 Unauthorized access to communications material/spaces

(Signature) (Date)

Completion of .3 area comprises 15% of watchstation.

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this emergency affect other operations/equipment/watchstations?
- F. Perform or simulate the immediate action for this emergency condition.

Total loss of power

(Signature) (Date)

Fire/flood/collision

(Signature) (Date)

Completion of .4 area comprises 15% of watchstation.

WATCHES

Stand 3 satisfactory watches under qualified supervision.

SIGNATURE _____ DATE _____

Completion of .5 area comprises 15% of watchstation.

Estimated completion time: 12 weeks

Before starting your assigned tasks, complete the following items:

PQS Qualifications: NAVEDTRA 43355-5AQ29

TASKS

For the tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What communications must be established?
- D. What safety precautions must be observed?
- E. Perform this task.

- | | <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> |
|---|----------|----------|----------|----------|----------|
| 1 Assume watch | X | X | X | | |
| <hr/> (Signature) (Date) | | | | | |
| 2 Coordinate functions of MPC | | X | X | X | X |
| <hr/> (Signature) (Date) | | | | | |
| 3 Coordinate functions of facilities control | | X | X | X | X |
| <hr/> (Signature) (Date) | | | | | |
| 4 Coordinate functions of signal bridge | | X | X | X | X |
| <hr/> (Signature) (Date) | | | | | |
| 5 Maintain CWO log | | X | | | X |
| <hr/> (Signature) (Date) | | | | | |
| 6 Interpret OPORDs/COMPLANS | | X | X | | X |
| <hr/> (Signature) (Date) | | | | | |
| 7 Initiate action to correct discrepancy reported by Facilities Control/Message Processing Center/Signal Bridge Supervisors | | X | X | X | X |
| <hr/> (Signature) (Date) | | | | | |

5330.1 TASKS (CONT'D)

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
.18 Coordinate total communication effort with all subscribers	X	X	X	X	X
_____ (Signature) (Date)					
.19 Maintain overall security of communications spaces	X		X	X	X
_____ (Signature) (Date)					
.110 Periodically spot check operation of all watchstations	X			X	X
_____ (Signature) (Date)					
.111 Maintain required reports to Communications Officer at sea	X		X		X
_____ (Signature) (Date)					
.112 Maintain required reports to Command Duty Officer in port	X		X		X
_____ (Signature) (Date)					
.113 Release COMMSPOT reports	X				X
_____ (Signature) (Date)					
.114 Inform Communications Officer/Command Duty Officer of changes/adverse conditions affecting overall communications operation	X		X	X	X
_____ (Signature) (Date)					

Completion of .1 area comprises 30% of watchstation.

INFREQUENT TASKS

For the infrequent tasks listed below:

- A. What are the steps of this procedure?
- B. What control/coordination is required?
- C. What communications must be established?
- D. What safety precautions must be observed?
- E. What conditions require this infrequent task?
- F. Perform or simulate this task.

Supervise emergency destruction of classified material and equipment

(Signature) (Date)

Implement emergency action plans

(Signature) (Date)

Handle emergency action/special category messages

(Signature) (Date)

Submit battle readiness reports

(Signature) (Date)

Completion of .2 area comprises 40% of watchstation.

ABNORMAL CONDITIONS - None to be discussed.

EMERGENCIES

For the emergency conditions listed below:

- A. What indications and alarms are received?
- B. What immediate action is required?
- C. What are the probable causes?
- D. What operating limitations are imposed?
- E. How does this emergency affect other operations/equipment/watchstations?
- F. What followup action is required?
- G. Perform or simulate the immediate action for this emergency condition.

Loss of power

(Signature) (Date)

(Signature) _____ (Date) _____

.43 Collision

(Signature) _____ (Date) _____

Completion of .4 area comprises 30% of watchstation.

5330.5 WATCHES - None.

Personnel Qualification Standard
Information Report and Suggestion Sheet
PQS DEVGRU AUTOVON 957-5367

DATE _____

Activity _____

Working Address _____

AUTOVON # _____

Standard Affected _____

NAVEDTRA # _____

Person Affected _____

Comments/Recommendations (Use additional sheets if necessary)

Questions for improving this Qual Standard

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